

SCHEIDEL-WESTERN  
X-RAY  
ACCESSORIES  
AND  
TUBES



SCHEIDEL-WESTERN X-RAY COIL COMPANY  
Largest Manufacturers of X-Ray Apparatus in the World  
737-739 WEST VAN BUREN STREET  
CHICAGO, ILL.

SERIES E

W. SCHEIDEL & CO.

*Manufacturers of*

X-Ray Apparatus, Induction Coils, Interrupters, Resonators, High Frequency Coils,  
Milliammeters, Rheostats, and other Electro-Therapeutic Apparatus

---

FACTORY, SALESROOM AND GENERAL OFFICES:

171-173 E. Randolph Street, Chicago,  
U. S. A.

**HIGHEST HONORS - FIRST GOLD MEDAL**  
for SCHEIDEL  
X-Ray Coils and Electro-Therapeutic Apparatus  
WORLD'S FAIR, ST. LOUIS, MO., 1904





## SCHEIDEL EXHIBIT

Louisiana  
Purchase  
Exhibition.

1904



Palace of Electricity  
Section 4  
Aisle 5



Just a Moment and do not turn this page before perusing its contents. With every confidence in the merits of our well known apparatus, we present our new catalog "D" here for your consideration.

We shall not elaborate within its pages the constructive merits of the individual pieces of apparatus, but rather rely on the universal reception it has been given by the medical profession as a proof of merit.

We need not say a word to those who have ever used the Scheidel Coil, but to those who contemplate purchase we most respectfully beg to submit that, the Scheidel Coil is computed, designed and built by experts in practical electrical engineering. It is modeled after the modern type of commercial high tension transformer, where efficiency is a vital fact. The core is of the best imported double annealed Norway iron wire.

The primary is so constructed that a set of switches will adapt it equally well to direct or alternating current. It is interchangeable, protected by a tube of the highest possible insulating qualities and supported independent of the secondary.

The secondary, in sections, has its wire of such cross section as to allow the operation of the coil at its maximum without heating and thus causing a breakdown.

The insulation for the secondary is flexible, self-sealing, not affected by temperature, constant and non-carbonizing.

The case is constructed of wood which experience has taught us to be the best adapted; finished in polished mahogany.

W. SCHEIDEL & CO.

## **Please Furnish this Information.**

When ordering X-Ray Coils or asking for prices on equipments:

Have you access to any electric current circuit?

Is it direct or alternating current:

If direct current, what is the voltage?

If alternating current, what is the voltage?

If alternating current, give number of cycles, or

Number of alternations per minute

State if current is single, two or three phase

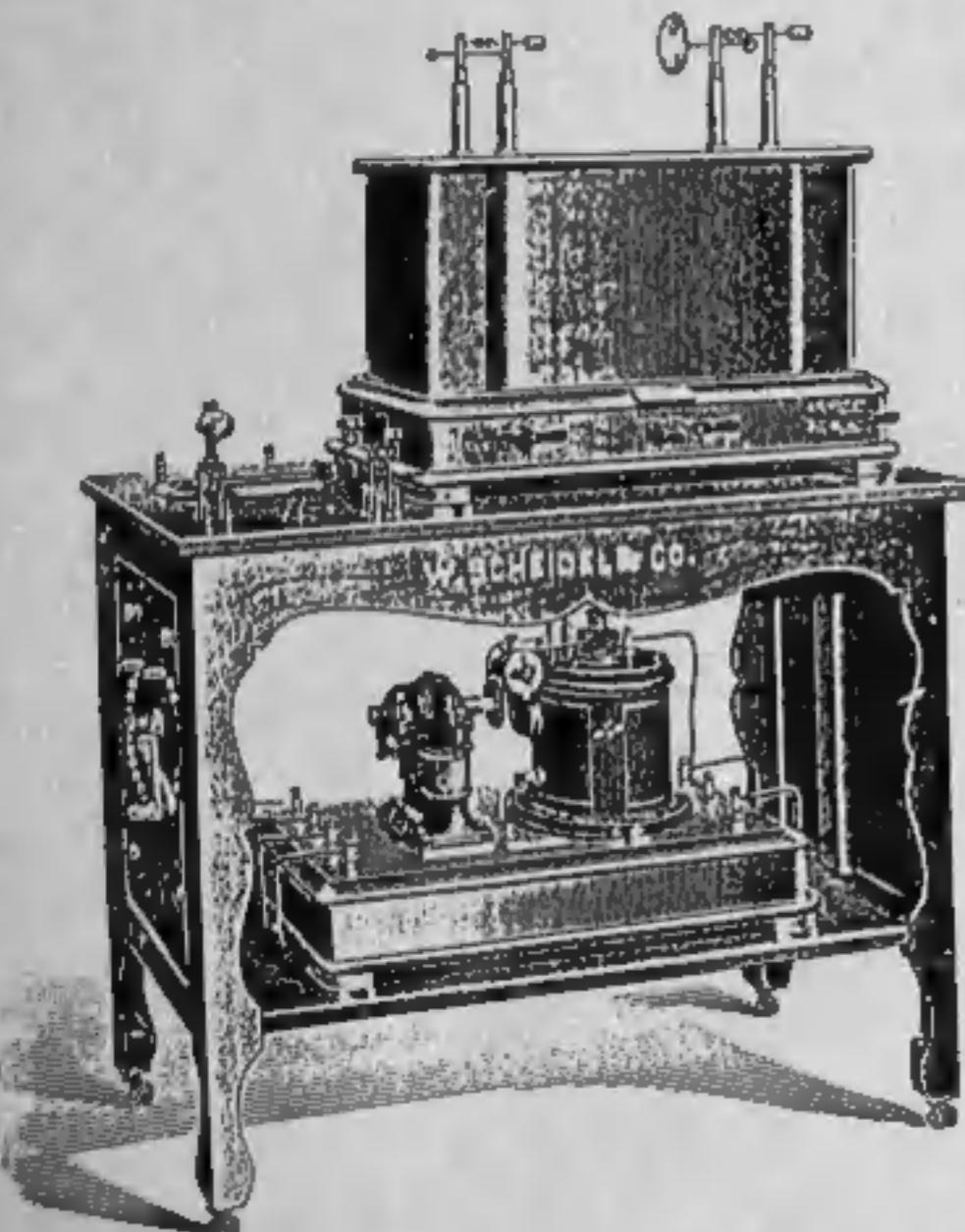
The superintendent of your electric light plant can tell you.

### **Notice.**

The superior merits of the Scheidel X-Ray Coil have brought a number of imitators into the field who are manufacturing induction coils, infringing on our patents Nos. 702,032 and 690,973; others pending. We beg purchasers as well as dealers and manufacturers to take notice that we will protect our rights under these patents. It is not worth while to take a law suit with your equipment even if given free. It can be said of coils like any other standard article most truthfully, that "Price governs Quality," and Scheidel coils are without a peer today. We invite comparison.

**Scheidel's Standard 12" D. C. Coil, Turbine Interrupter and Table Switch Board.**

**Compact in Form and Elegant in Appearance.**



**Fig. 1.**

The illustration on this page represents the most complete arrangement of our 12-inch apparatus. The coil is arranged with primary switches which afford a wide range of variation. The secondary terminals are easy of access for connecting the tube.

The Interrupter rests upon a shelf arranged beneath the coil while the main Rheostat is set flush with panel at the end of the table. We would call special attention to the convenient arrangement of all switches, meters, rheostats, timing device, etc. The motor Rheostat is of special importance as the rapidity of interruptions are controlled by this means. Easy to connect to the line by means of ordinary extension cord. Simple to operate as the apparatus may be started by simply closing a switch, or stopped by opening it. The current is made strong or weak by turning the Rheostat Crank as you would regulate your gas light to suit requirements.

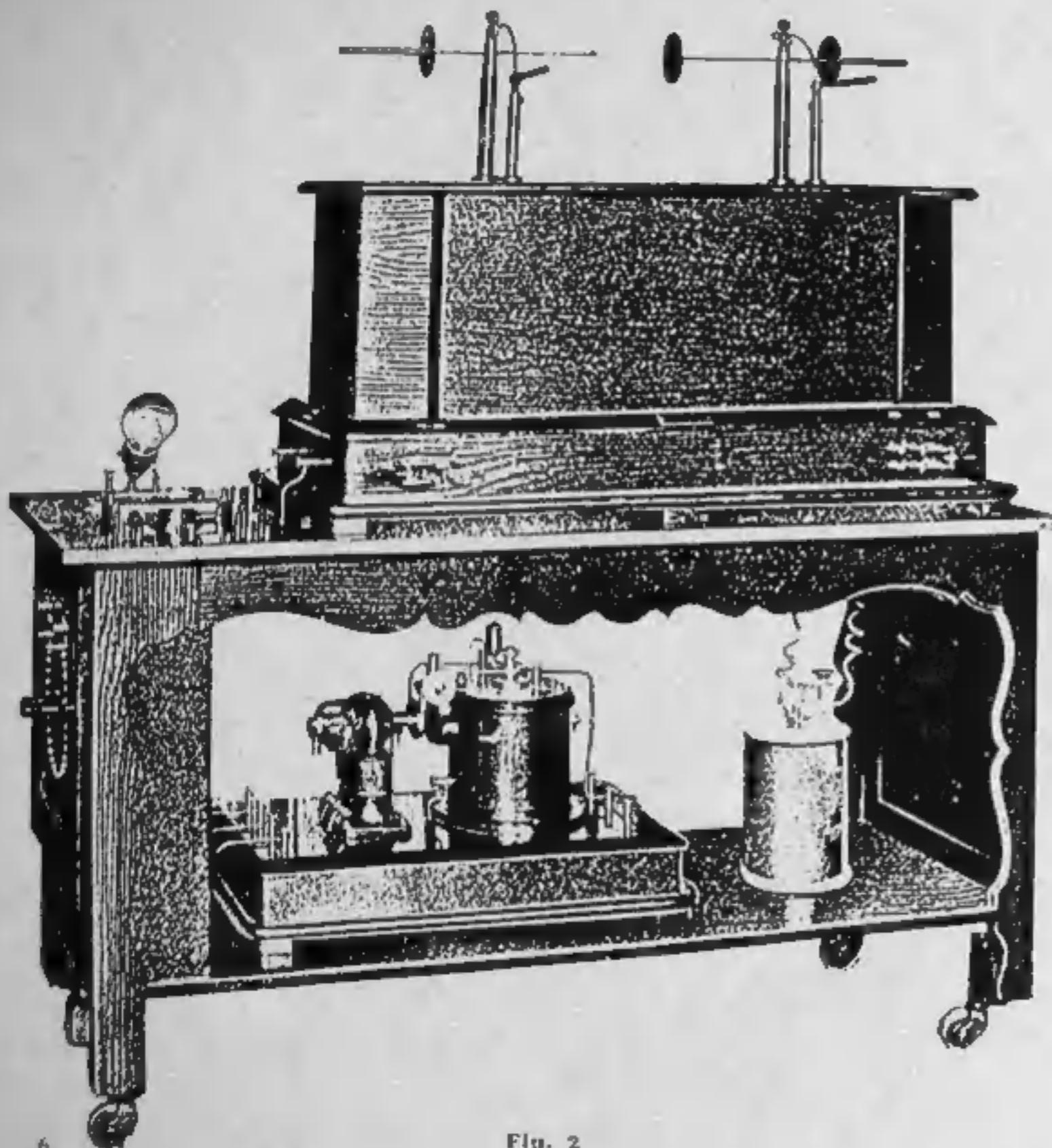


Fig. 2

**Cut of 20" Coll.**

The coil illustrated on this page is of 20-inch spark length capacity. The general arrangement does not differ materially from our standard 12-inch apparatus as illustrated on page 3 of this catalogue, except in the matter of two interrupters being used. Some X-Ray operators prefer to use the Wehnelt interrupter under some conditions. This equipment is so arranged that by changing the position of one switch the current may be changed to either interrupter desired.

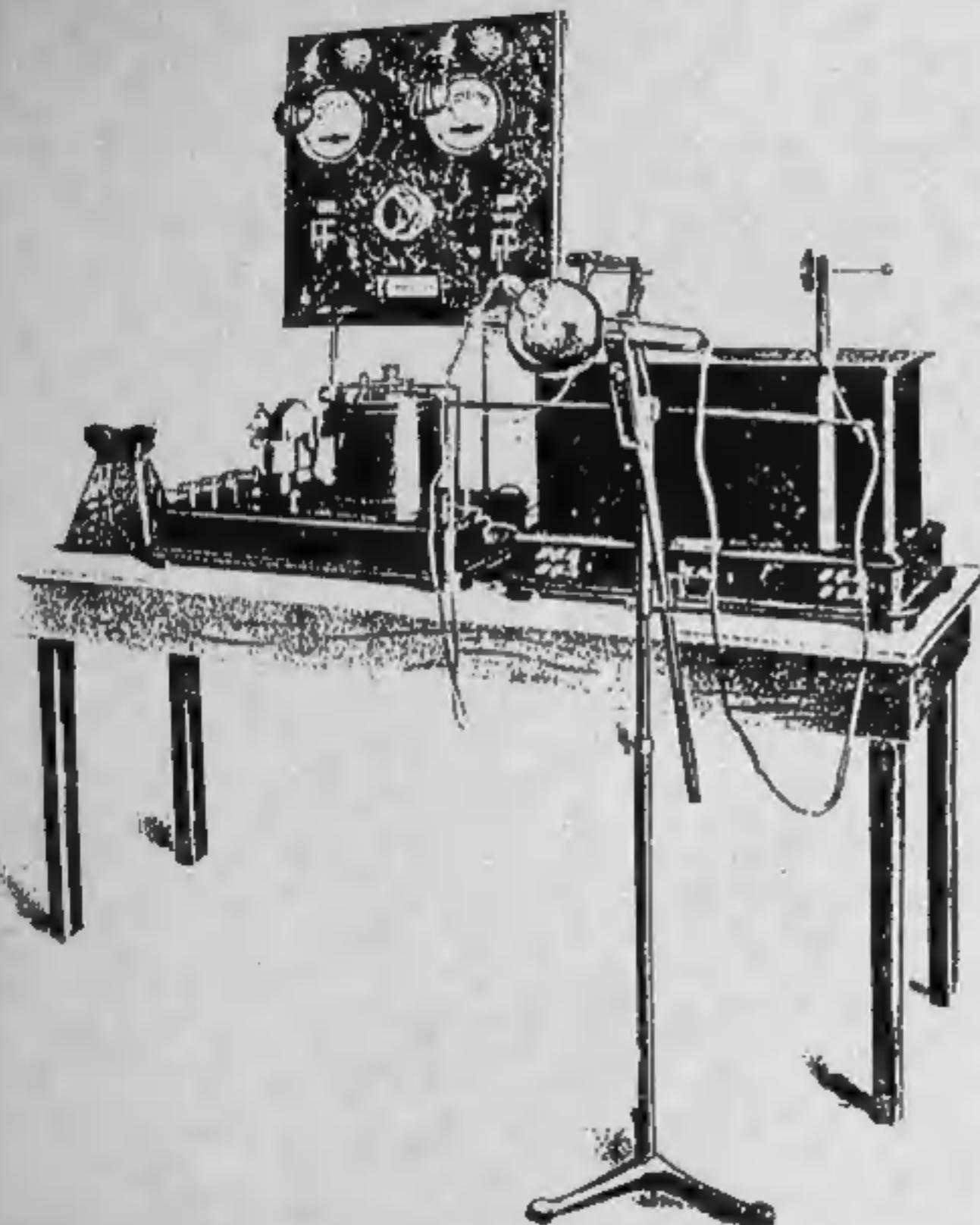


Fig. 3.

### **The Scheidel Standard Wall Plate Equipment.**

This equipment is the same as that illustrated on page five except, as to arrangement of the various parts, viz., the meters, rheostats and switches are mounted on a marbleized slate base, one inch thick by 25 inches square (this size varies under some conditions and combinations of parts) which may be attached to wall or placed in any position that may be found by experience to be the most convenient. Any ordinary table of proper size may be used, or we can supply a suitable table properly finished to match wood work of coil. Adjustable spark gaps are supplied with all coils.

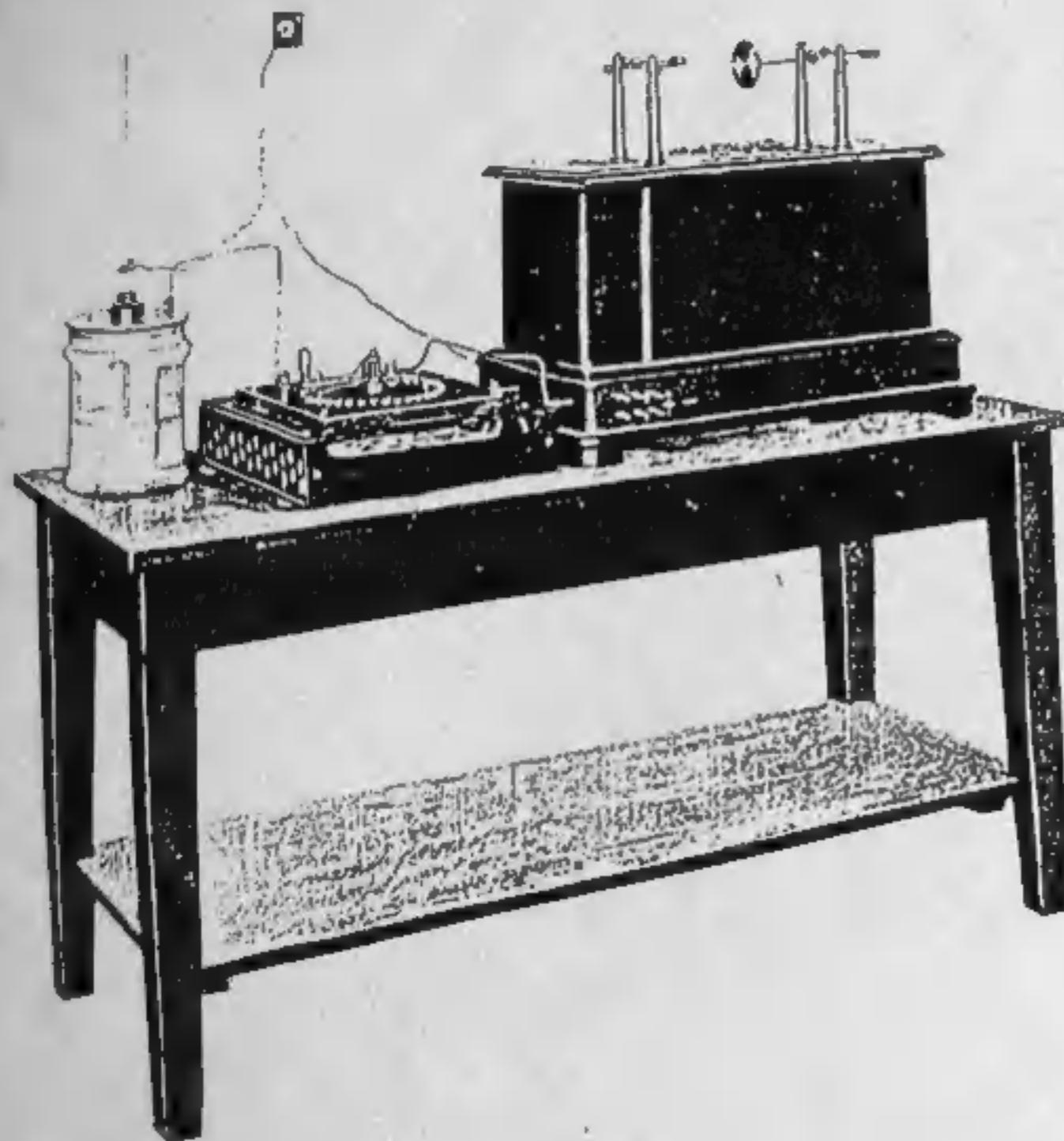


Fig. 4.

#### **Alternating Current Apparatus.**

The above cut shows our apparatus adapted for use with alternating current. It will give most satisfactory results for treatment as well as for diagnostic and radiographic purposes, and is also adapted for use with our high frequency apparatus.

When contemplating to install such apparatus, give voltage and number of cycles or alternations as requested on second page.

### Scheldel's Special Coil for Skin Treatment

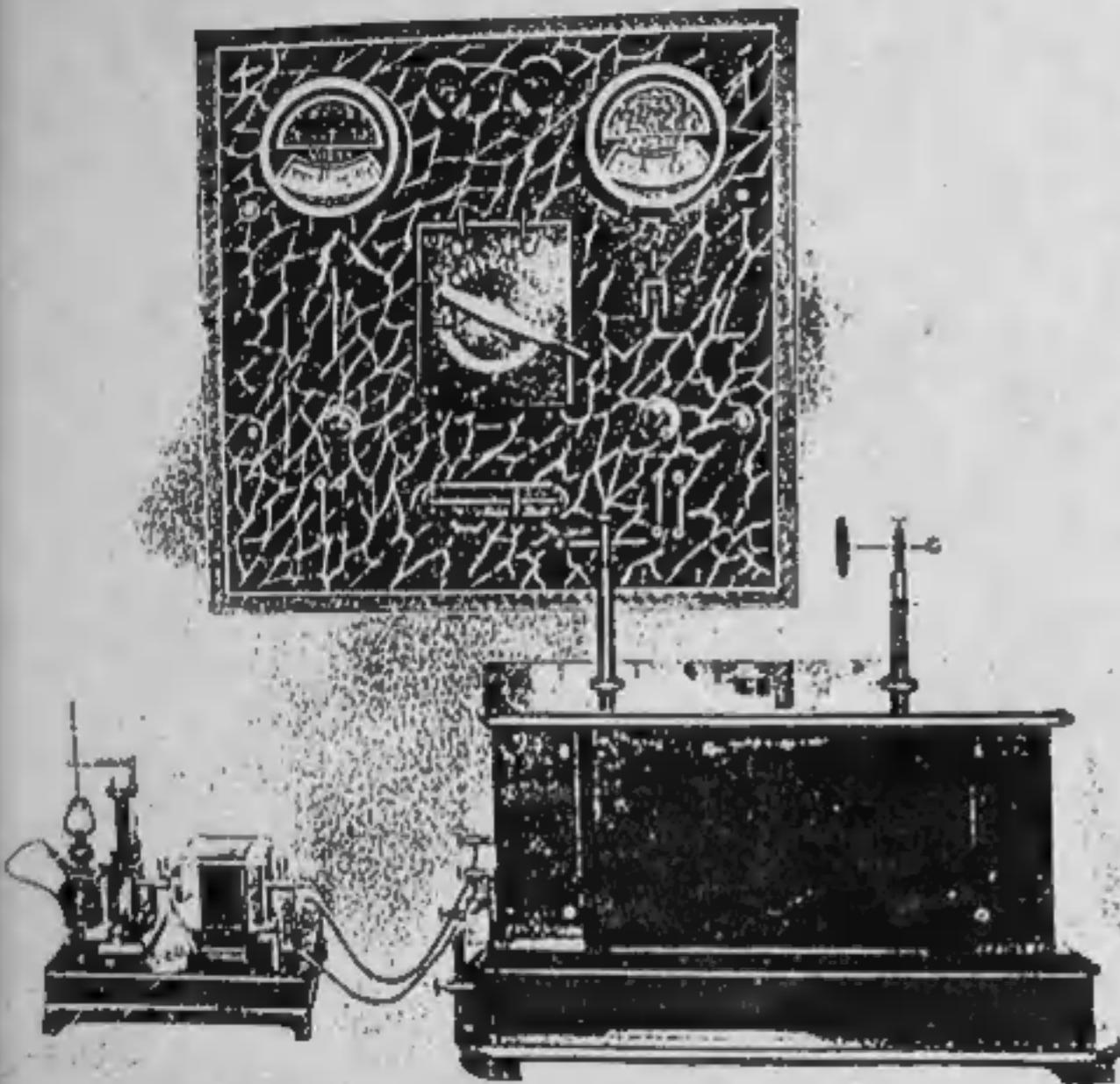
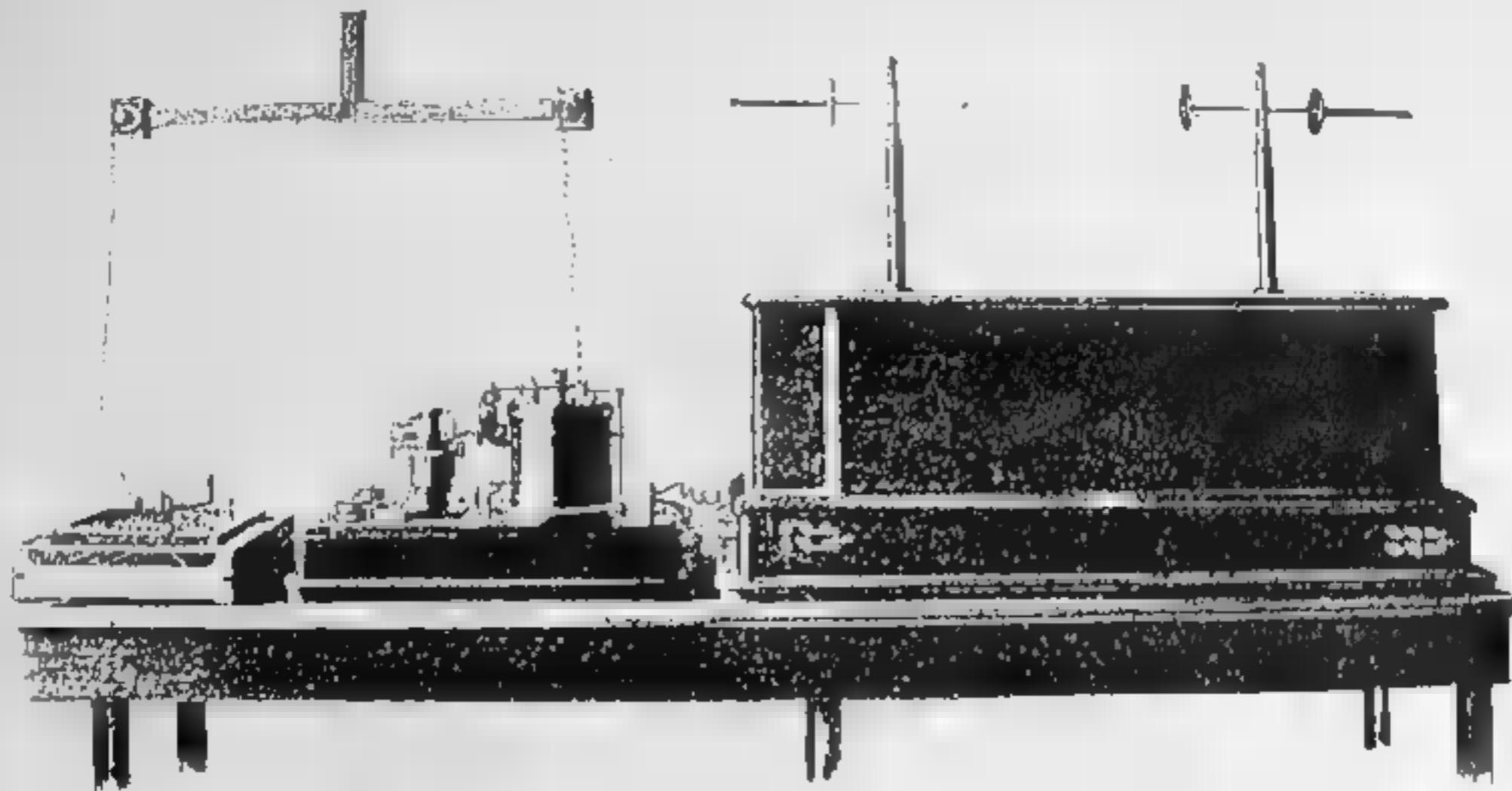


Fig. 6.

In this type of apparatus we illustrate a Special Coil with very fine Windings, as constructed after PROFESSORS FREUND and SCUIRR, of Vienna, specially for skin treatments and the removal of hair, etc. This equipment consists of a wall plate with volt meter, amperemeter and rheostat for regulating the motor speed, and a cell-selector for regulating the voltage in the primary circuit of the coil.

The Dip Interrupter illustrated is used with this coil as it is recommended by PROFESSORS FREUND and SCUIRR, of Vienna, for skin treatments. This interrupter is driven by a motor arranged for 110 volt current or batteries. The needle of the interrupter dipping into a cup of mercury. The cup is raised or lowered by means of a milled disc to change the amount of current flowing through the coil.

**Scheldel's Standard Coil with Mercury Turbine Interrupter.**



**FIG. 6.**

The above combination consisting of a Coil, Interrupter and Rheostat is the most simple arrangement of direct current apparatus.

We manufacture but one grade of goods, therefore our patrons are assured of receiving the best we produce whether they order a complete table equipment or only a single part. The three parts shown above are the essentials of an X-Ray Apparatus. Our interrupters and rheostats are made in one size only, but the coil can be supplied in any spark length desired.

Scheldel Portable Coils.

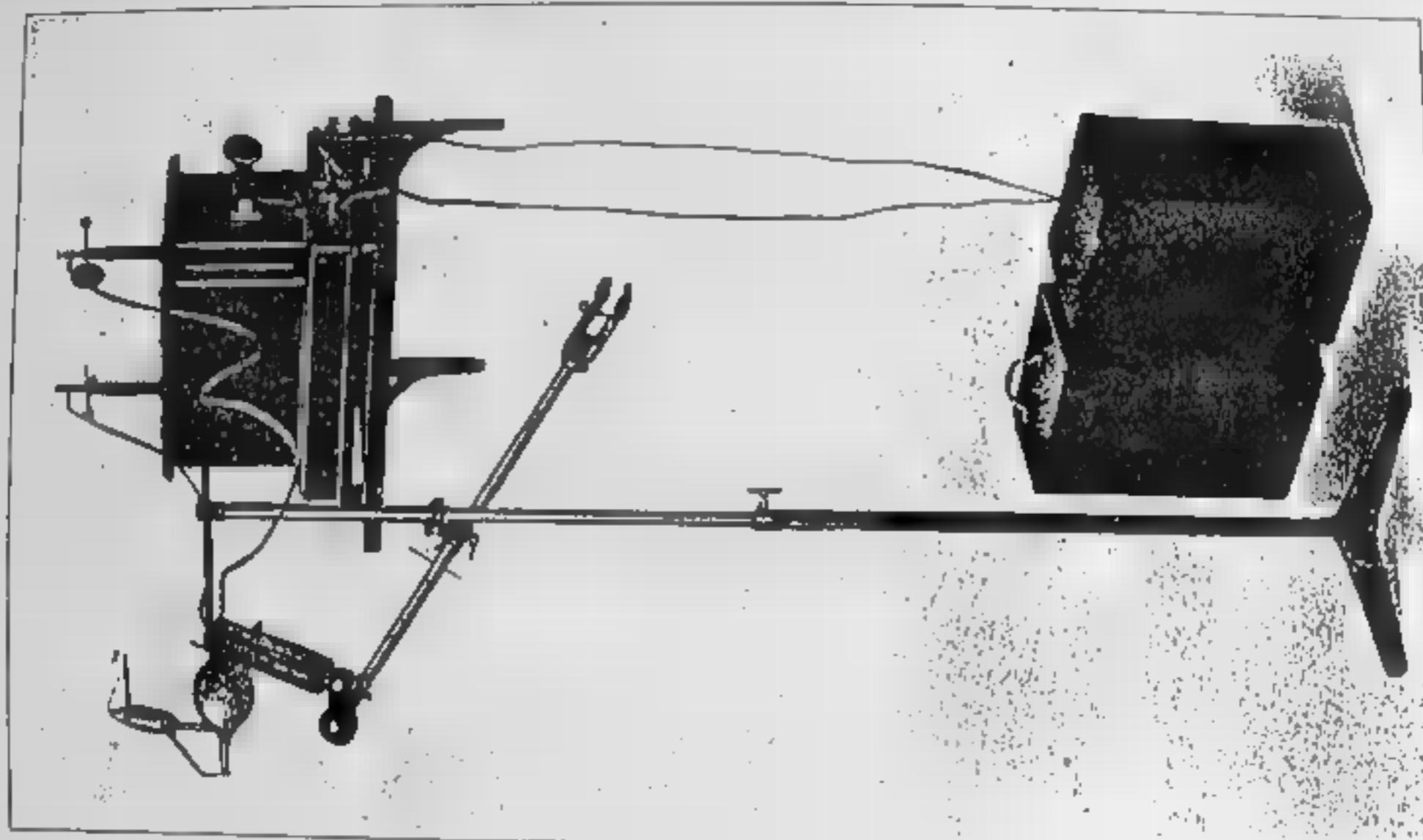
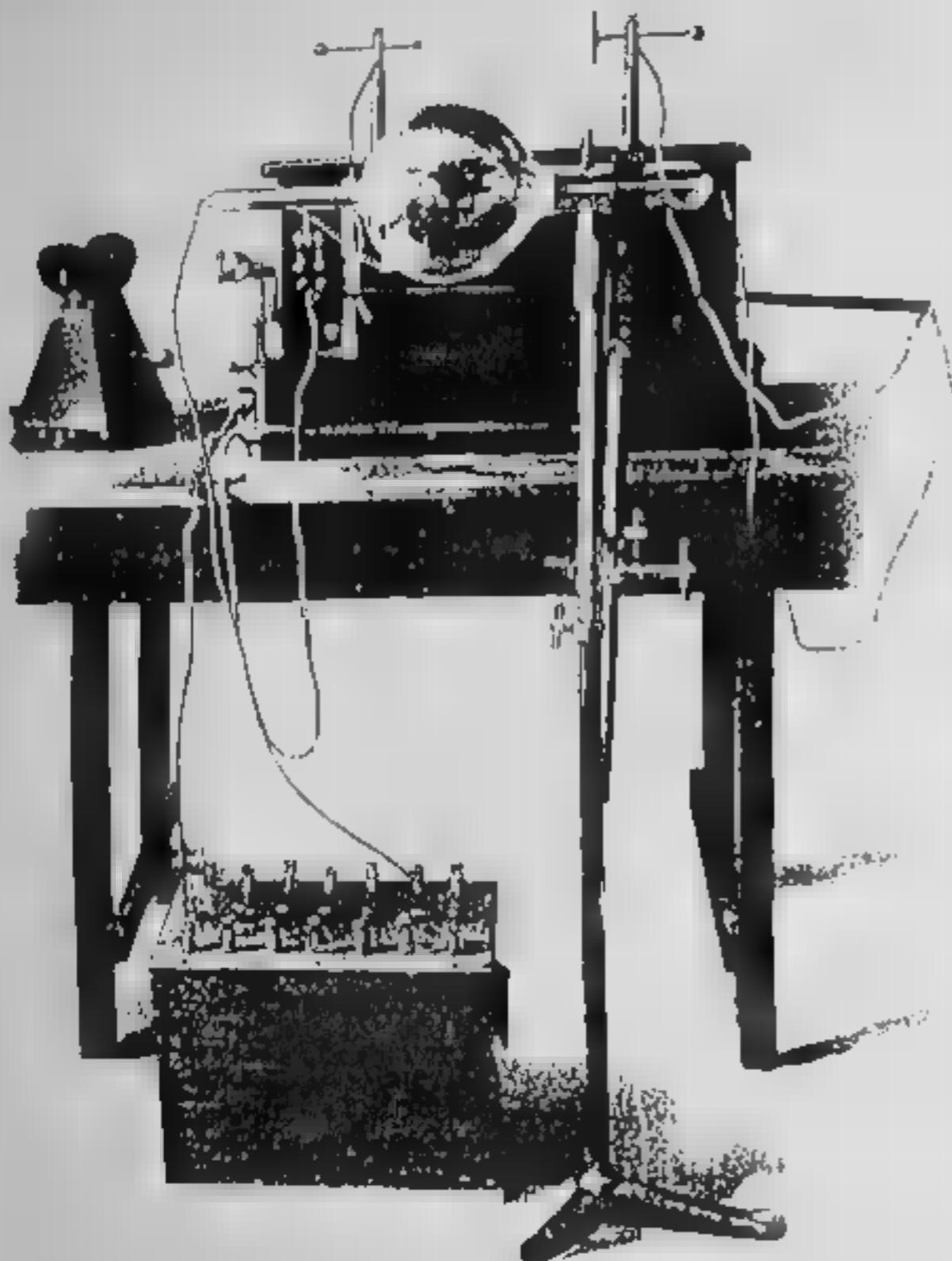


FIG. 7.

We would call special attention to our several types of portable X-Ray coils which are provided with vibrator interrupters and are also arranged so that they may be operated from the 110 volt direct current by means of our Wehnelt interrupter or from the alternating current of 50 to 110 volts with our special alternating interrupter. This type of apparatus is particularly desirable for those of the profession who have electric current at night only, and for those who have no lighting current and have occasion to use the X-Rays in portable form.



### Scheidel's 12" Portable Coil.

In this cut is shown the 12-in. Portable Coil, which we manufacture; and also the battery for operating it. This coil is built exactly the same as the 110 volt coil in outer appearance, except that the windings on the primary are changed to adapt it to the batteries. It has a special vibrator with adjustable spring interrupter so that the rate of vibrations can be varied.

The battery usually supplied with this coil, as illustrated is our standard seven-cell storage battery which for portability and efficiency we have found to suit all requirements for an apparatus of this type. Batteries of greater capacity will be supplied if requested.

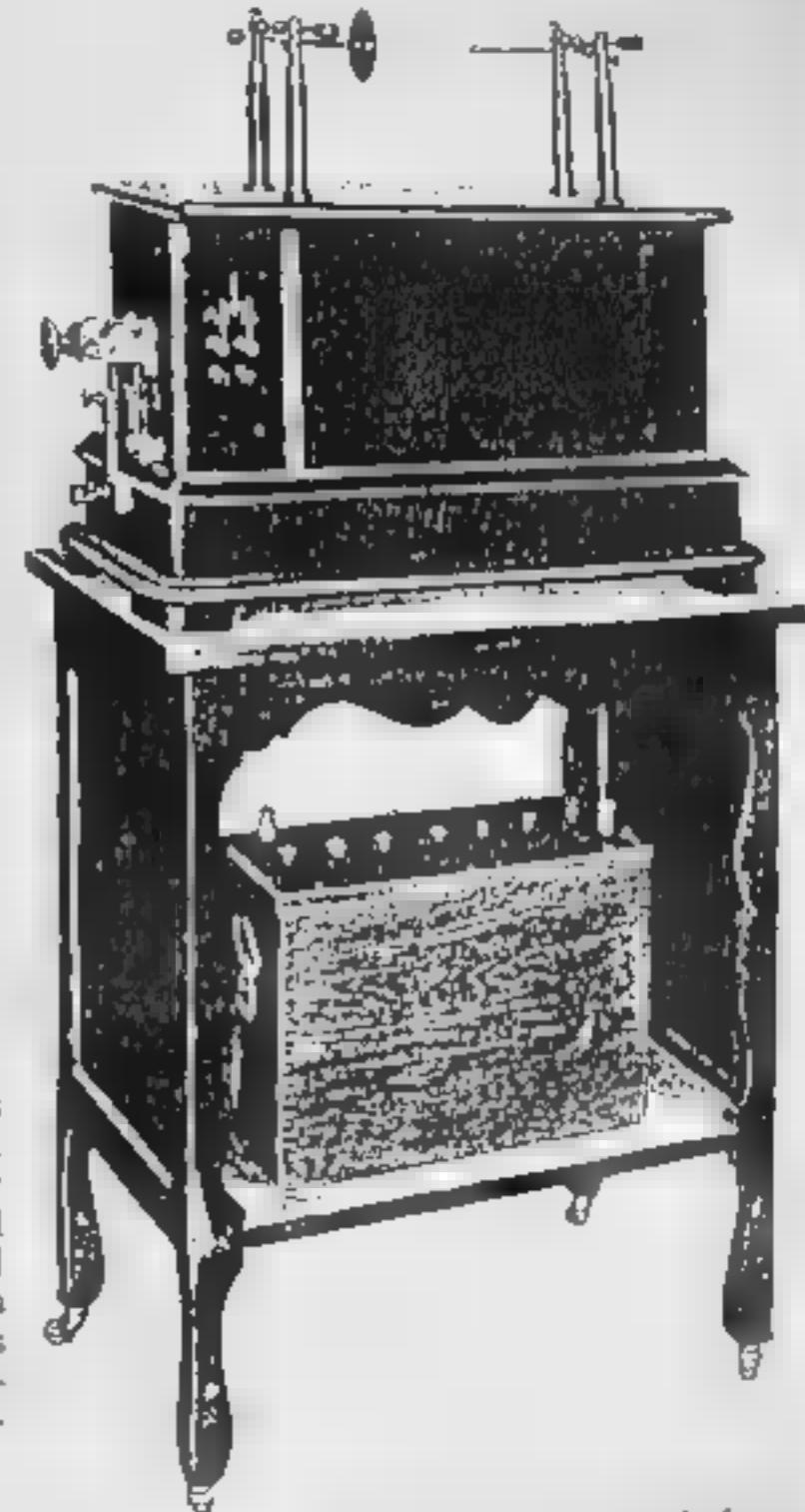


Fig. 6. 12" Portable Coil, Mounted on Table with Batteries on Shelf Below

## Mercury Turbine Interrupter

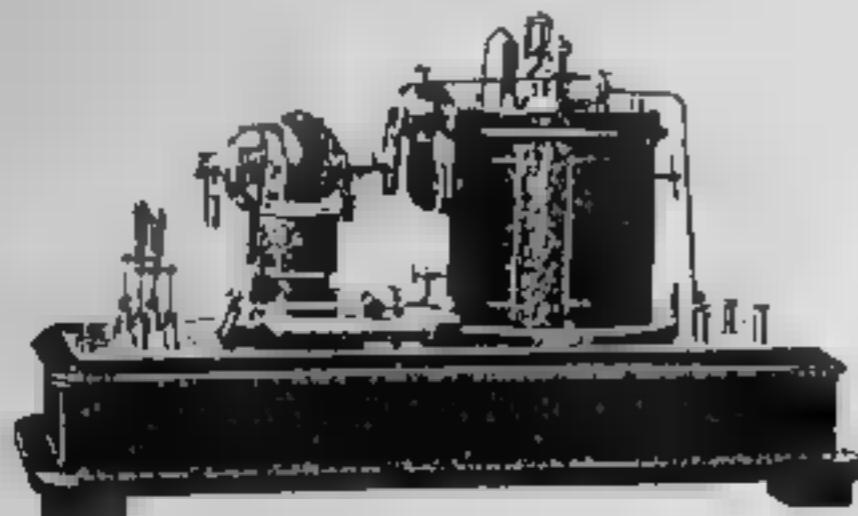


Fig. 1.

**Interrupter with Operative Switches.**

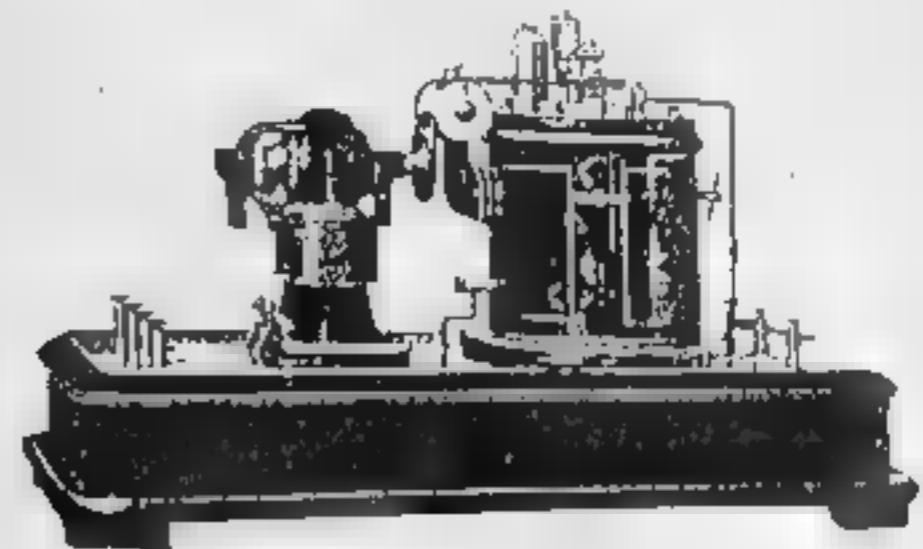


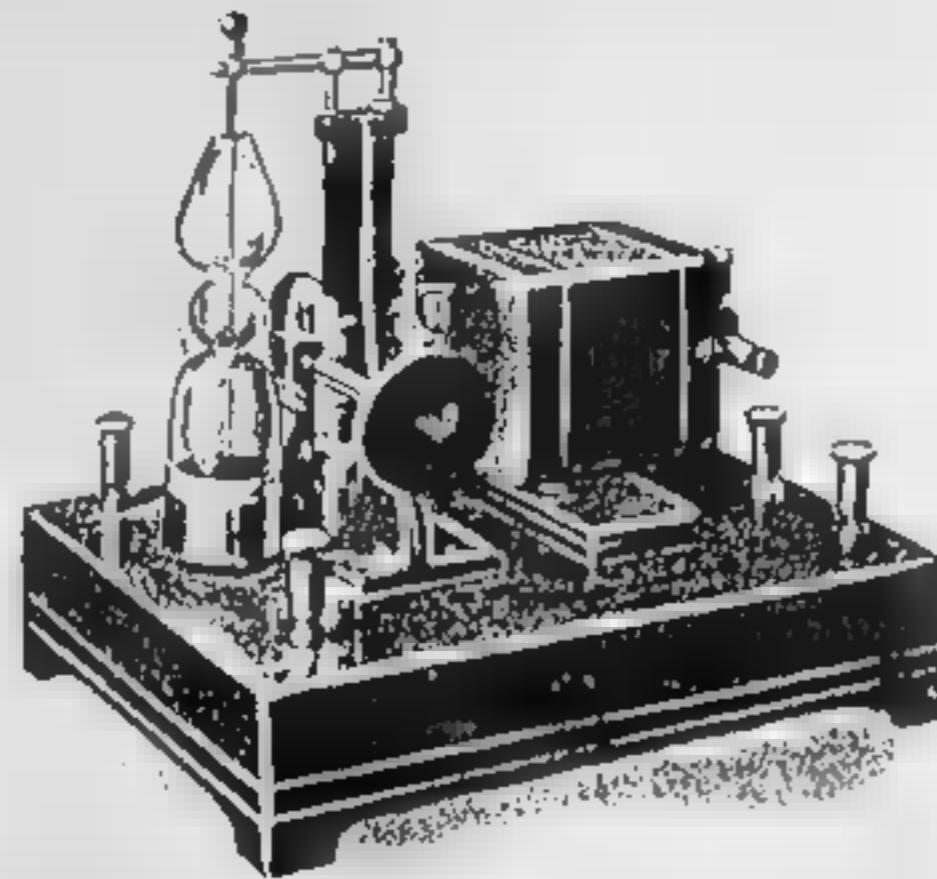
Fig. 2.

**Style of Interrupter used with Switch Board or Table Apparatus.**

In the above cuts we show the Scheidel patented Mercury Turbine Interrupter which is known to be the most perfect type of interrupter for use on direct currents of from 50 to 250 volts. This interrupter has a pot containing four pounds of metallic mercury (quick silver) in which revolves a hollow shaft and disc causing a jet of mercury to be thrown against copper segments by centrifugal force, thus completing the circuit.

The rapidity of interruptions may be varied by either speeding the motor or changing the number of segments. The base of the interrupter contains the condensor which may be adjustable when so ordered, but when complete Scheidel equipments are ordered, we always permanently adjust the condensor to the coil supplied.

**Scheldel's Dip Interrupter for use with Battery Coils.**



The interrupter base is of cast iron, highly japanned, and on this rests the mahogany base to which the parts are secured. The motor can be used with battery or 110 volt current. Attached to the shaft of the motor is an eccentric which imparts a vibratory motion to the contact arm, and to this arm is secured a point or needle that dips into a cup of mercury covered with alcohol.

The up and down motion imparted to the contact needle makes and breaks the circuit of the coil, and the strength of the current is regulated by raising or lowering the cup of mercury, by turning a milled disc which operates a rack and pinion on the arm carrying the mercury cup.

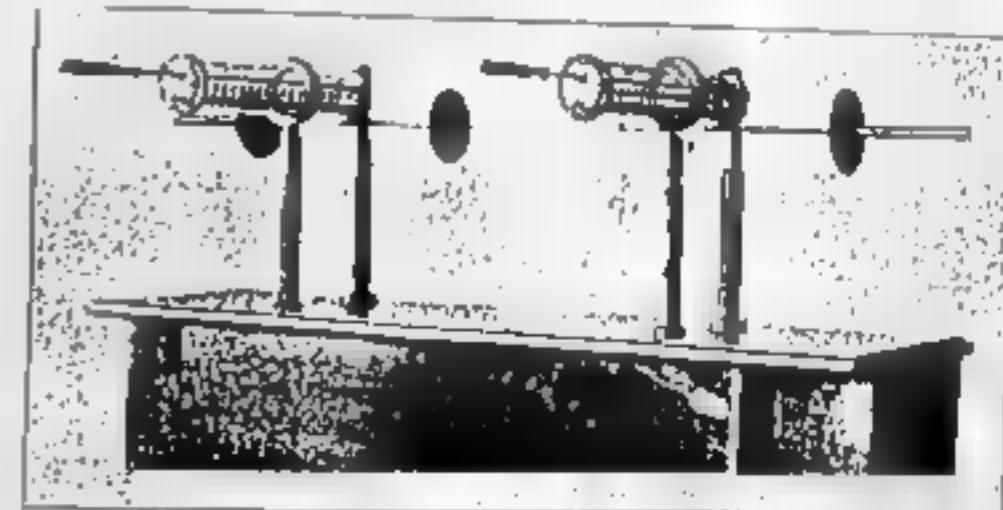
[REDACTED]

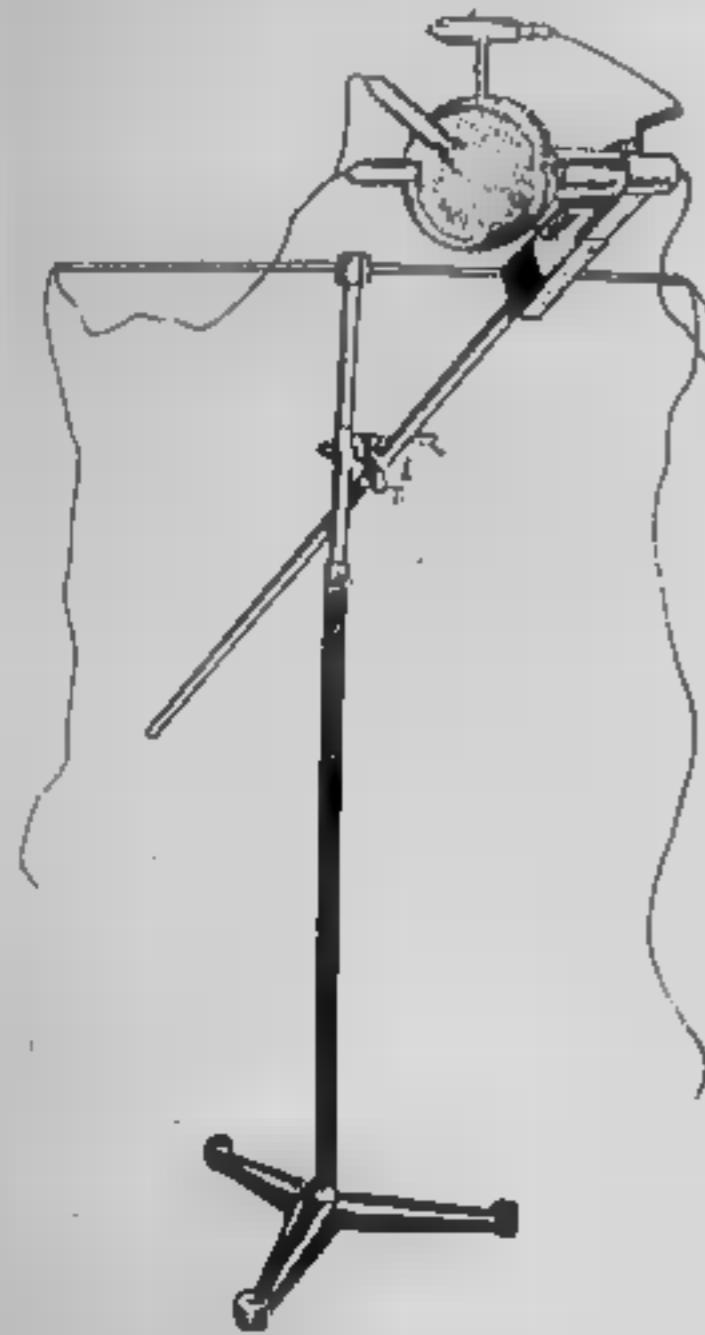
It is of greatest importance, when making radiographs that all X-Ray light beyond that necessary to illuminate the area to be diagnosed should be excluded since this superfluous light tends to false active radiations. This apparatus is especially designed to eliminate these false radiations and is consequently adapted for securing the most difficult radiographs.

This Interrupter is especially designed for alternating current. It requires no water cooling device and will give satisfactory continuous service.

### Multiple Spark Gaps

These will materially increase the range of any X-Ray Coil, permitting the use of tubes, which without them would show such a low vacuum as to give no X-Ray light at all. In the hands of the careful operator the life of tubes will be materially increased by the use of these spark gaps.

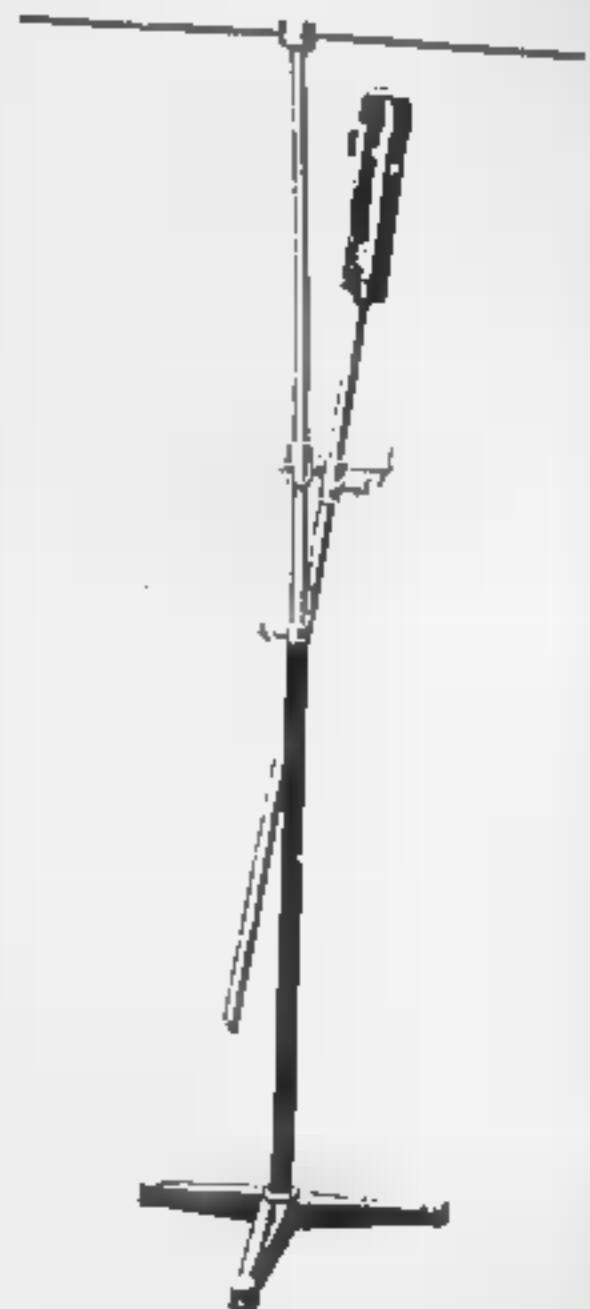




### Scheldel's Tube Stands

This Tube Stand, is of our own design, and it is very stable and rigid.

With the universal joint it can be adjusted in any direction by loosening a thumb screw, so it may be adapted to suit any requirements. On the top is a hard rubber rod used to support the tube cords. This is made so that it adjusts itself to any position in which the tube may be turned, and when not in use, it may be telescoped into a small space. All the parts are nickel plated, except the base, which is japanned.



### Tube Stands.

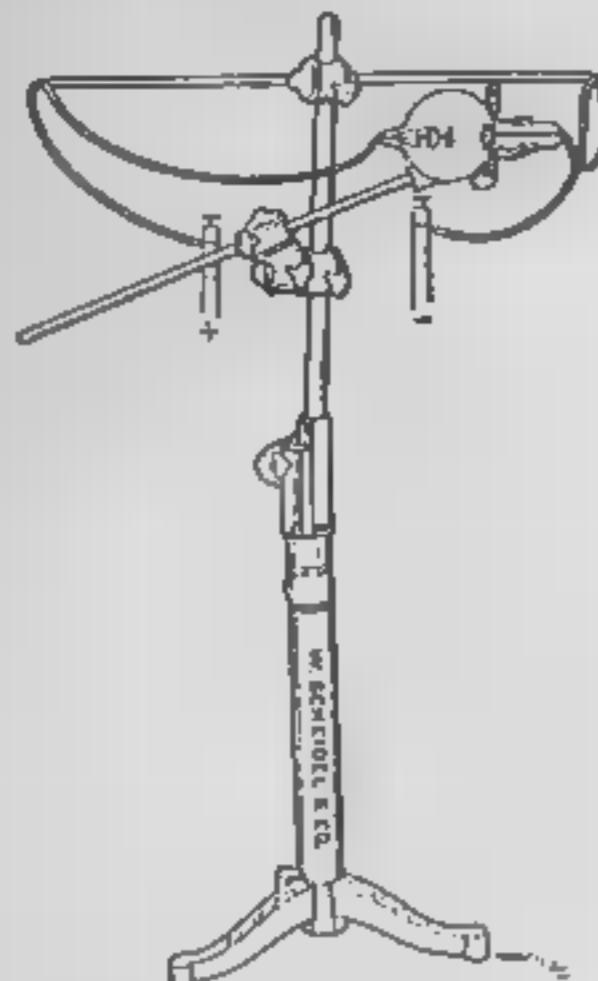


Fig. 1.

The above tube stand is made principally of wood supported by a heavy iron tripod, nicely enameled.

This stand has universal adjustments and can be furnished in either natural birch, oak or mahogany finish. It is a most desirable stand for large hospital equipments when it is given our standard mahogany finish to match the coil case.

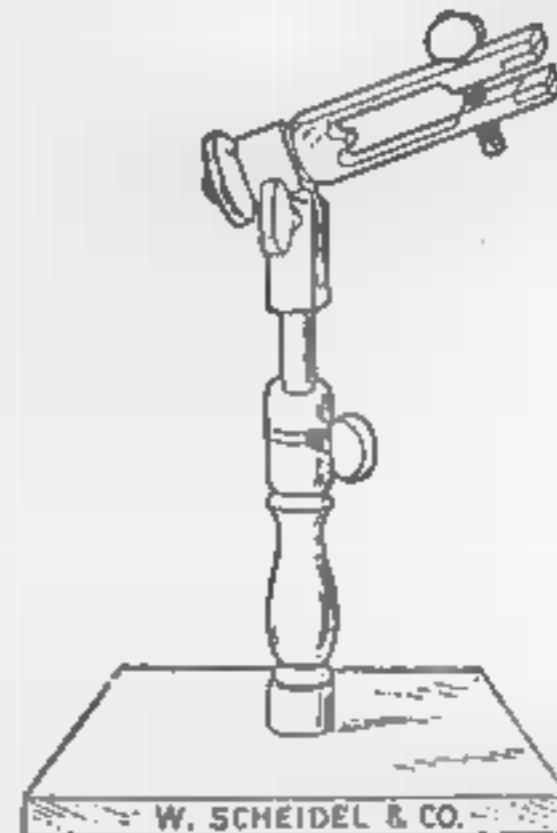
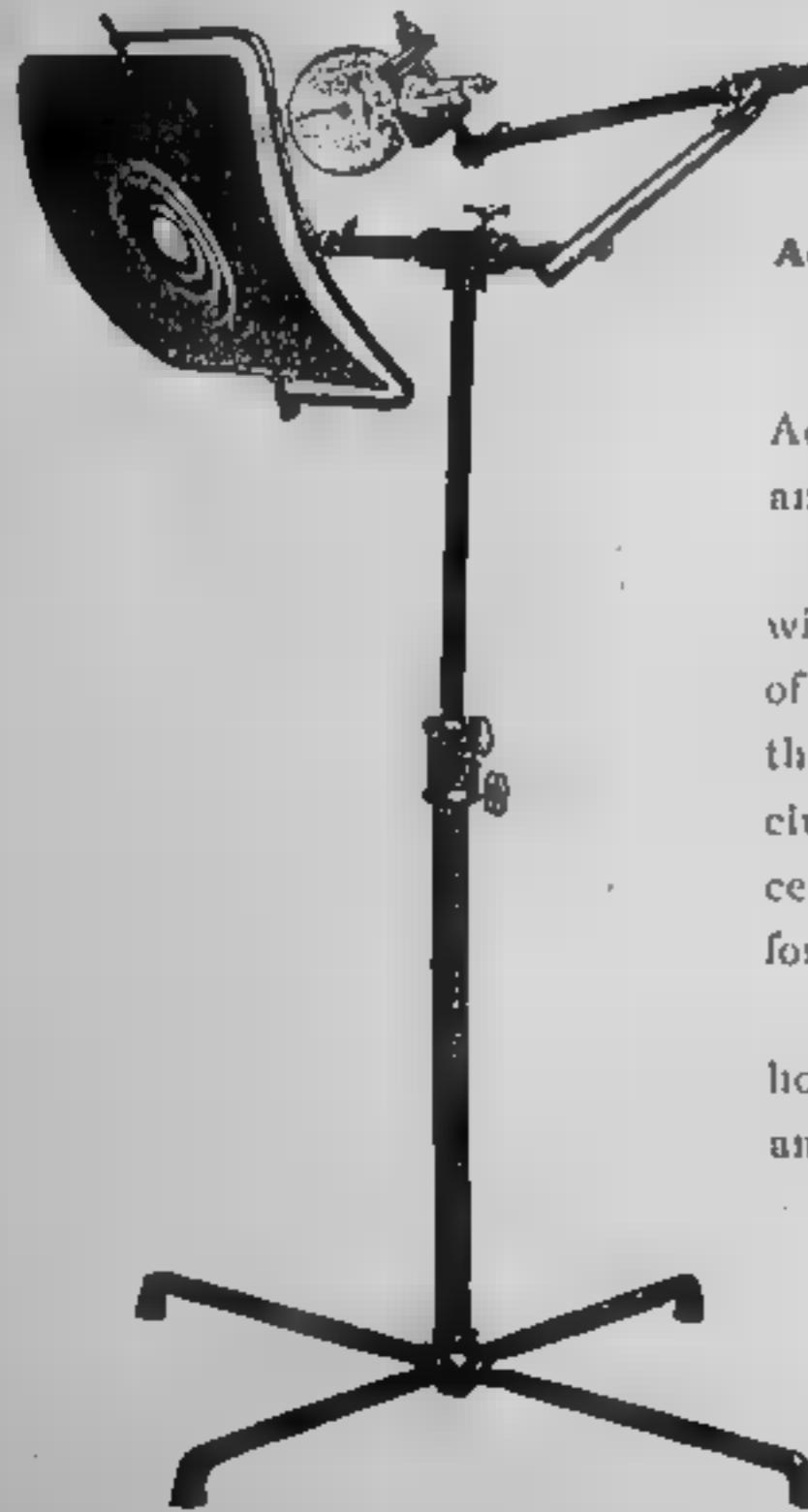


Fig. 2.

This is a small wood stand, shellac finish. It is provided with either straight or curved clamp, as ordered.



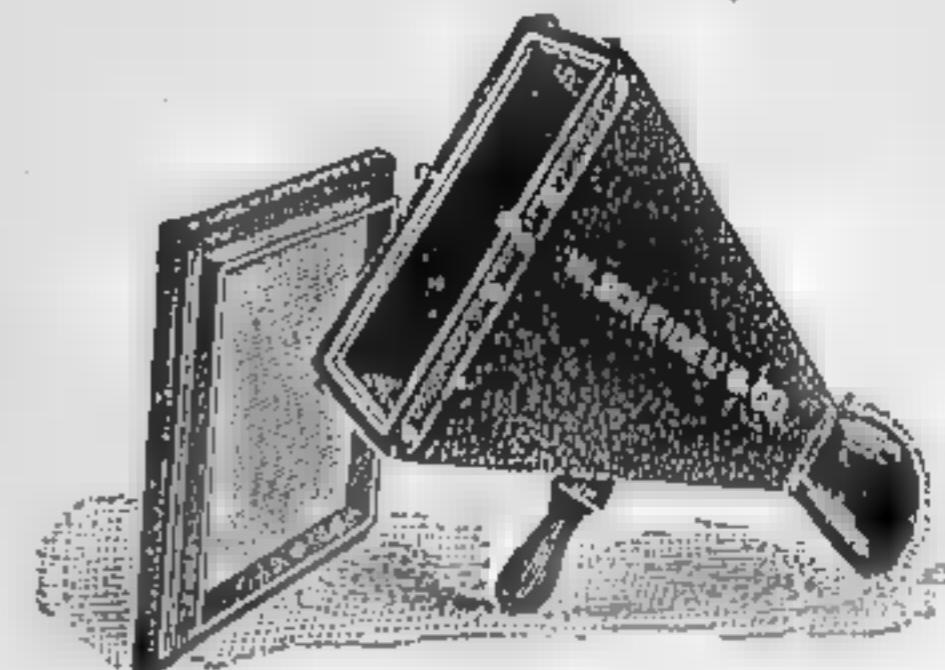
#### **Adjustable Tube Shield and Holder.**

This cut shows our Adjustable Tube Shield and Holder.

The shield is provided with several diaphragms of different diameter, thus permitting the exclusion of all but the central rays necessary for the work to be done.

The tube shield and holder are adjustable to any position.

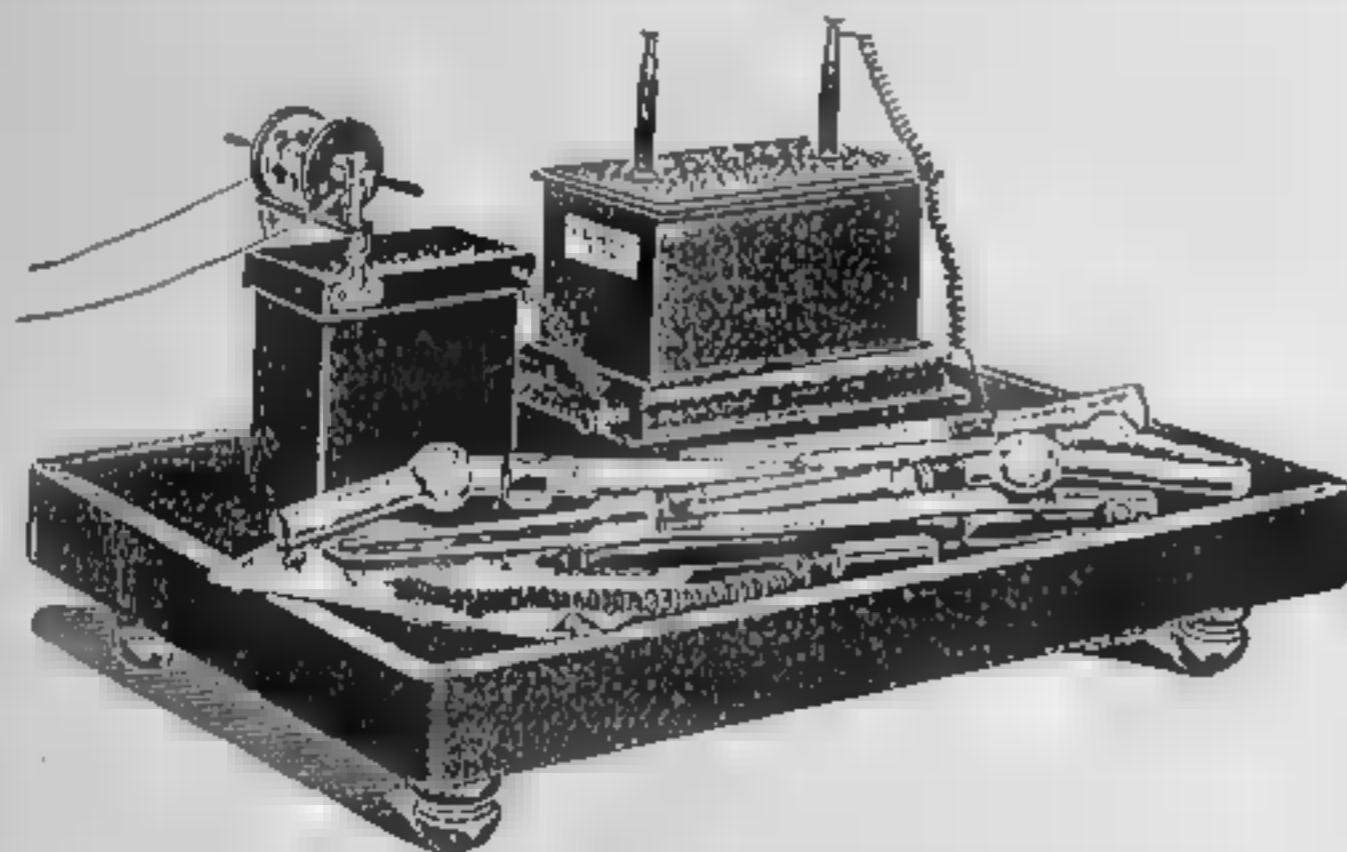
#### **Fluoroscopes.**



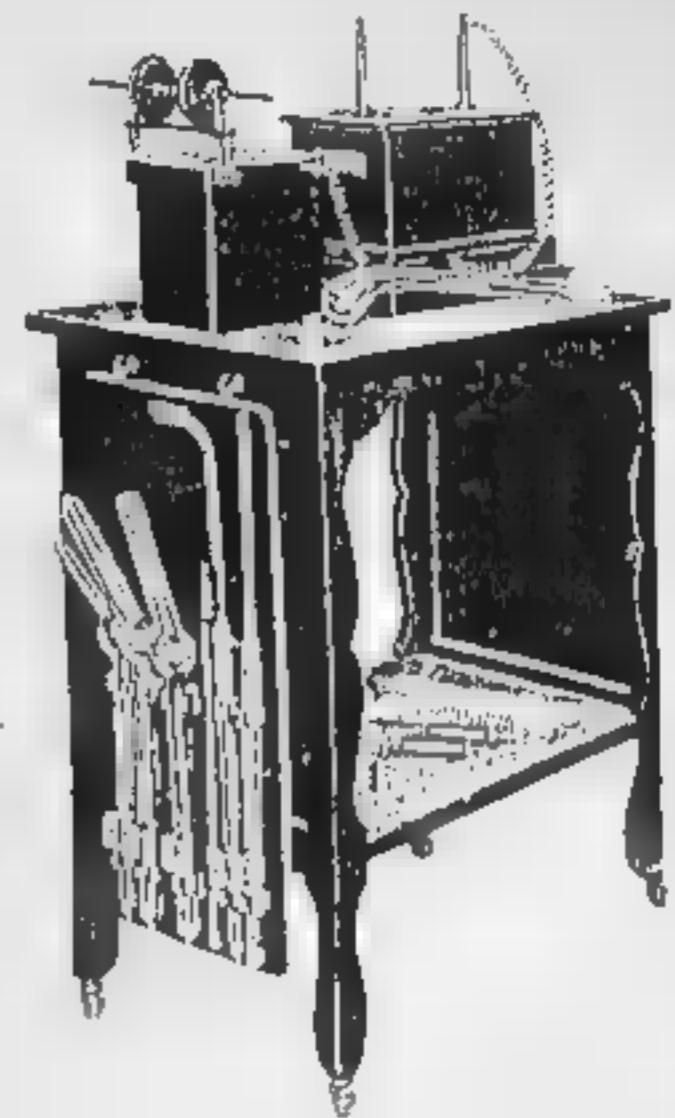
We carry in stock Platinum Barium Cyanide screens and fluoroscopes of all standard sizes. We have two grades of screens, first and second quality, of which the first is a special superfine grade, giving the finest definition. The second quality is the grade commonly sold as the best and will give very good definition.

We can also furnish all sizes of re-enforcing screens for skiagraphic work and will quote prices on application.

**High Frequency Coil and Interrupter, Mounted on Table with Electrode Board Attached to Side.**



**Fig. 1.**



**Fig. 2.**

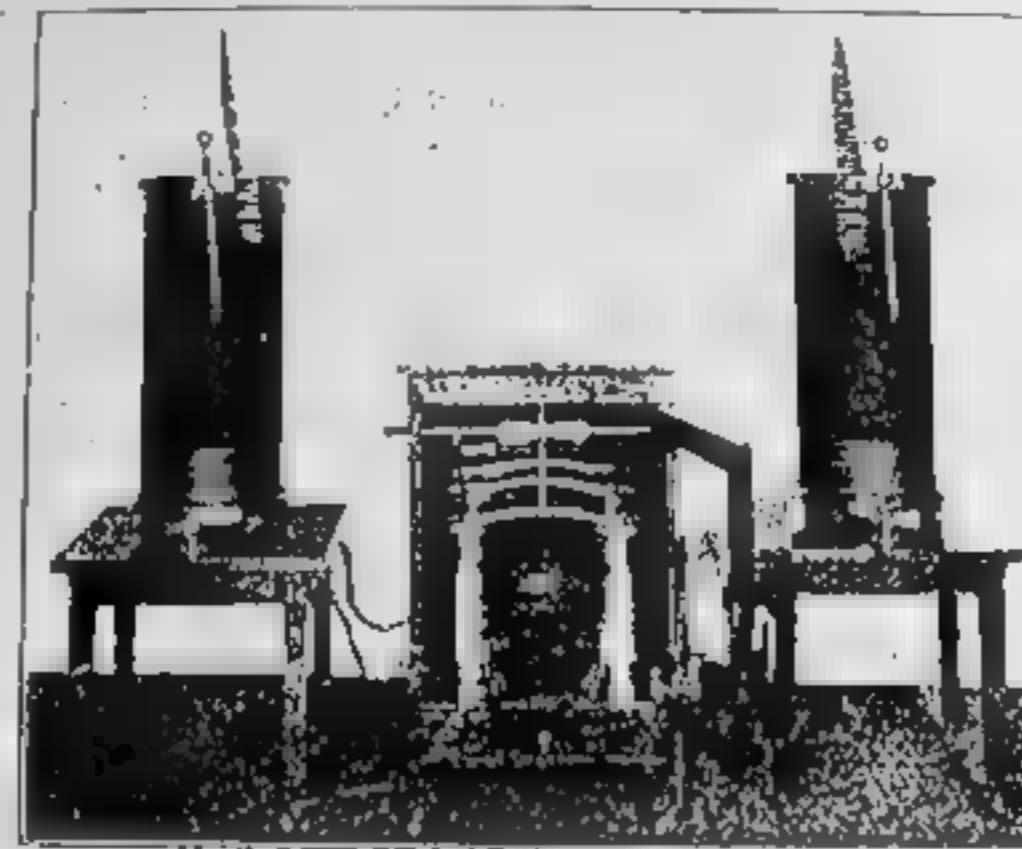
The high Frequency apparatus as shown above, is especially adapted and designed for use in connection with coils or static machines, and will give gratifying results for internal and external treatment of infectious and malignant diseases, and rheumatic and nervous afflictions.

The essential parts are, the high potential condenser with adjustable spark gap, the high Frequency or Tesla coil, and the various vacuum electrodes by which the treatment is administered. Complete apparatus as per price list.

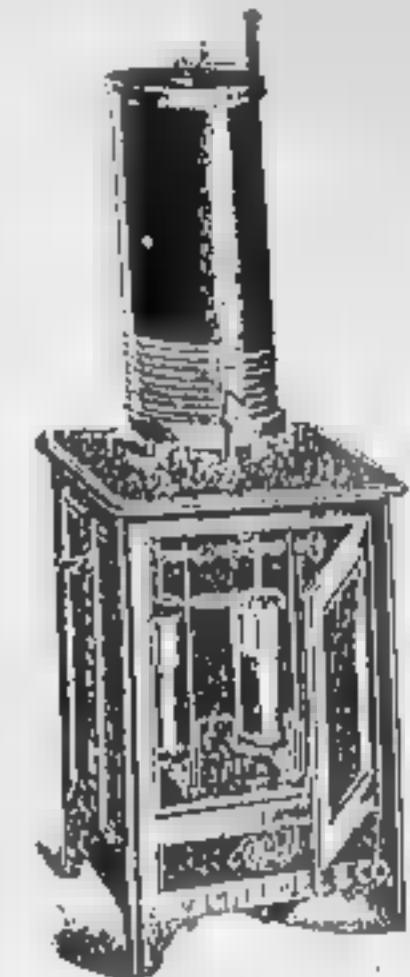
### Resonators, Double and Single



Type 1. Open Cabinet



Type 3. Double Closed Resonator



Type 2. Closed Cabinet

Type 1. Shows our single open form resonator. After making a careful study of the existing types of this apparatus, we have brought this out as best adapted to the needs of the medical profession; to be used with the Auto-Condensation Couch, Solenoids and Auto-Conduction Cages illustrated on the following pages.

Type 2. Single Closed Resonator. This is the same as that described in the preceding paragraph with the exception of the Leyden jars and spark gap being inclosed in a cabinet.

Type 3. Double Resonator. This cut shows our Double Resonator which is very powerful and especially adapted for use with Auto-Condensation Couches, Auto-Conduction Cages, Solenoids, large effluvial discs and all forms of electrodes, etc. Necessary Leyden jars and spark gaps are inclosed within the cabinet.

**Auto-Conduction Cages.**

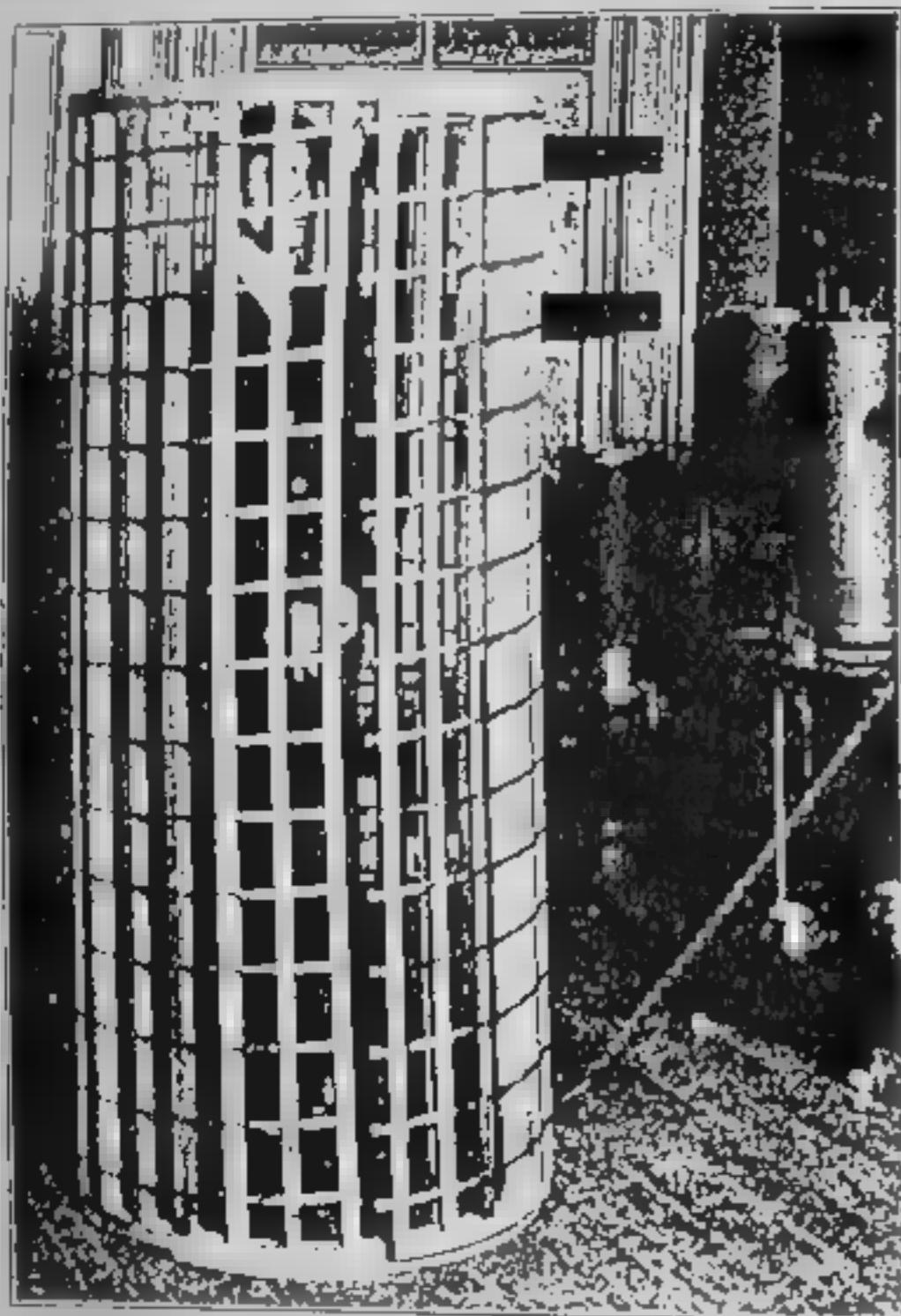


FIG. 19.

**Solenoids.**

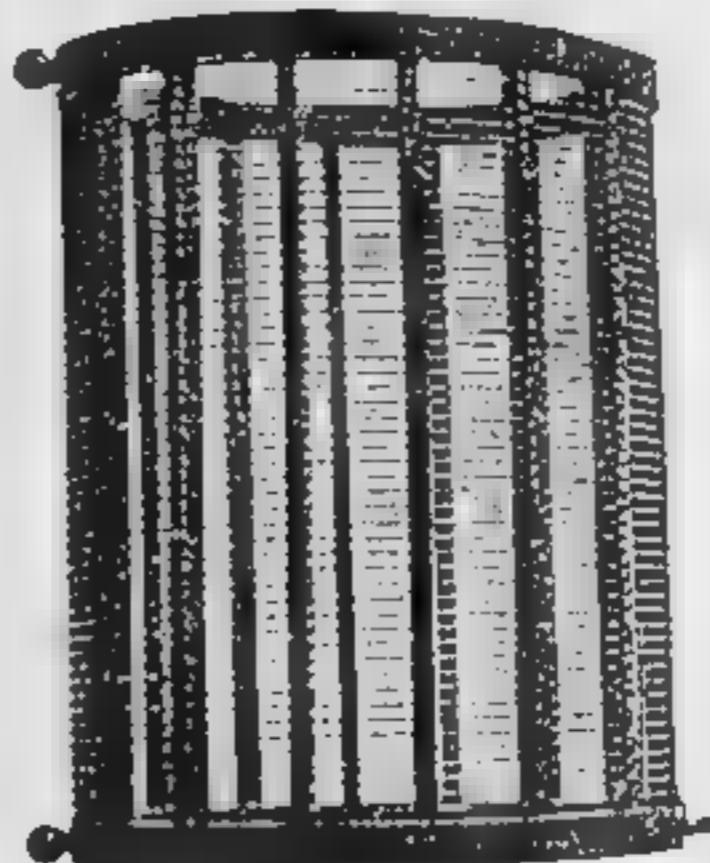


FIG. 20.

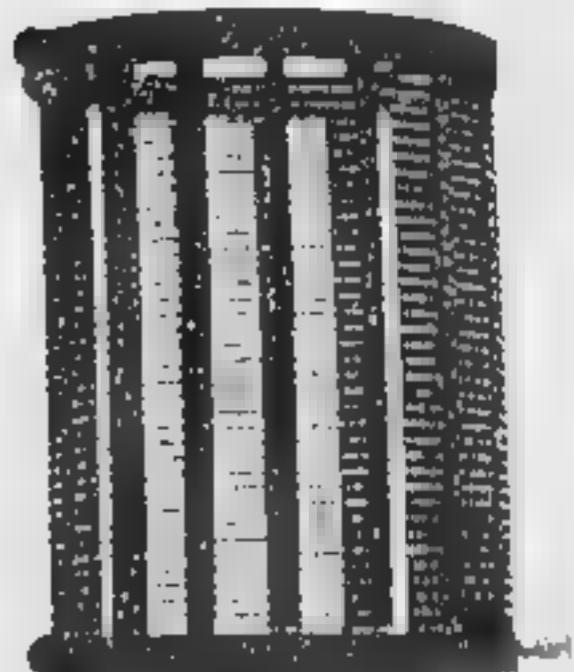
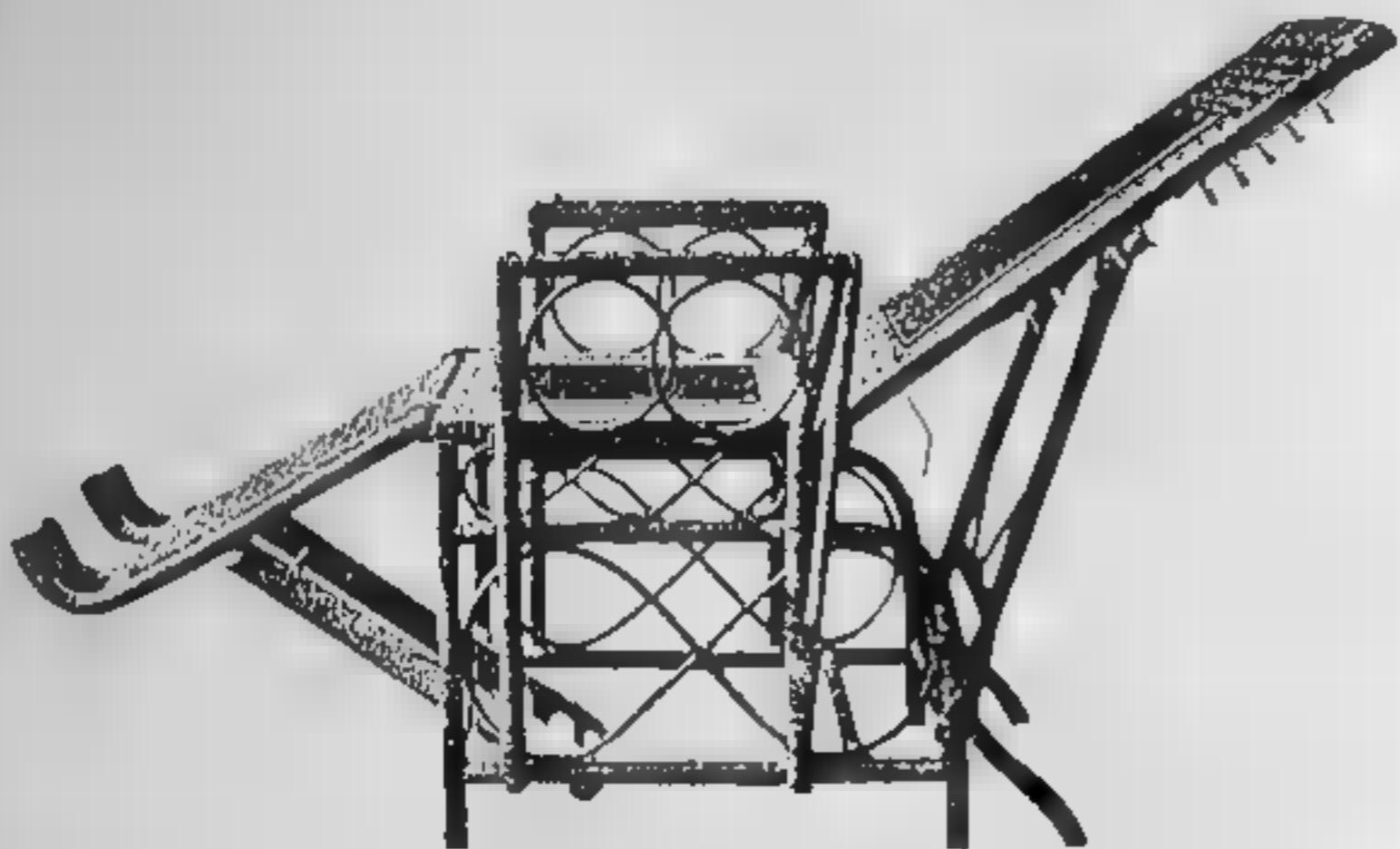


FIG. 21.

The Auto-Conduction Cage Fig. 19 is used extensively with double or single Oudin Resonators for general high frequency treatment.

The Solenoids are used for high frequency treatment of the arms and legs respectively.

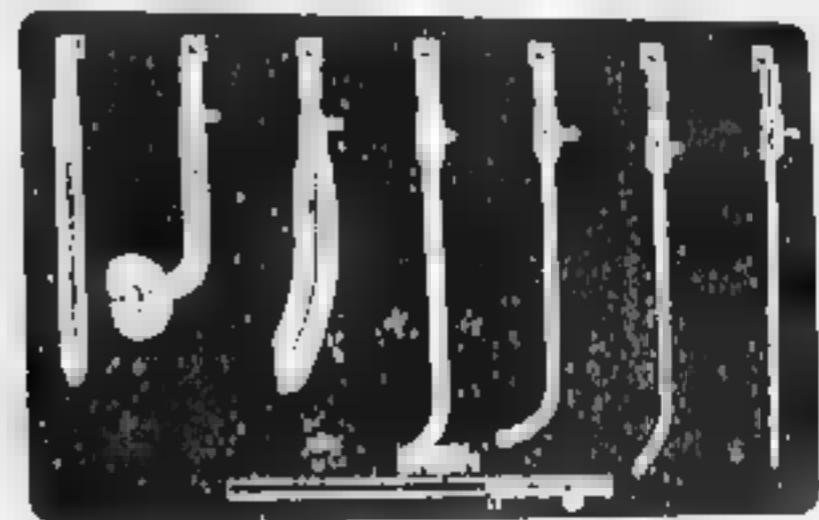
**Auto-Condensation Couch.**



**Fig. 22.**

Auto-Condensation Couches are used with double or single resonators and are indispensable for general high frequency treatment. They come in two types with an adjustable head and foot rest, as shown in cut, and in the form of a stationary couch. The adjustable form is constructed of bamboo and rattan. Each couch is equipped with proper insulating cushions complete in every detail.

**Electrode Board.**



**Fig. 23.**

Electrode Board, polished mahogany finish with full set of electrodes and handles.

**Electrode Board without Electrodes**

1.00

### MILLI-AMPERMETER.



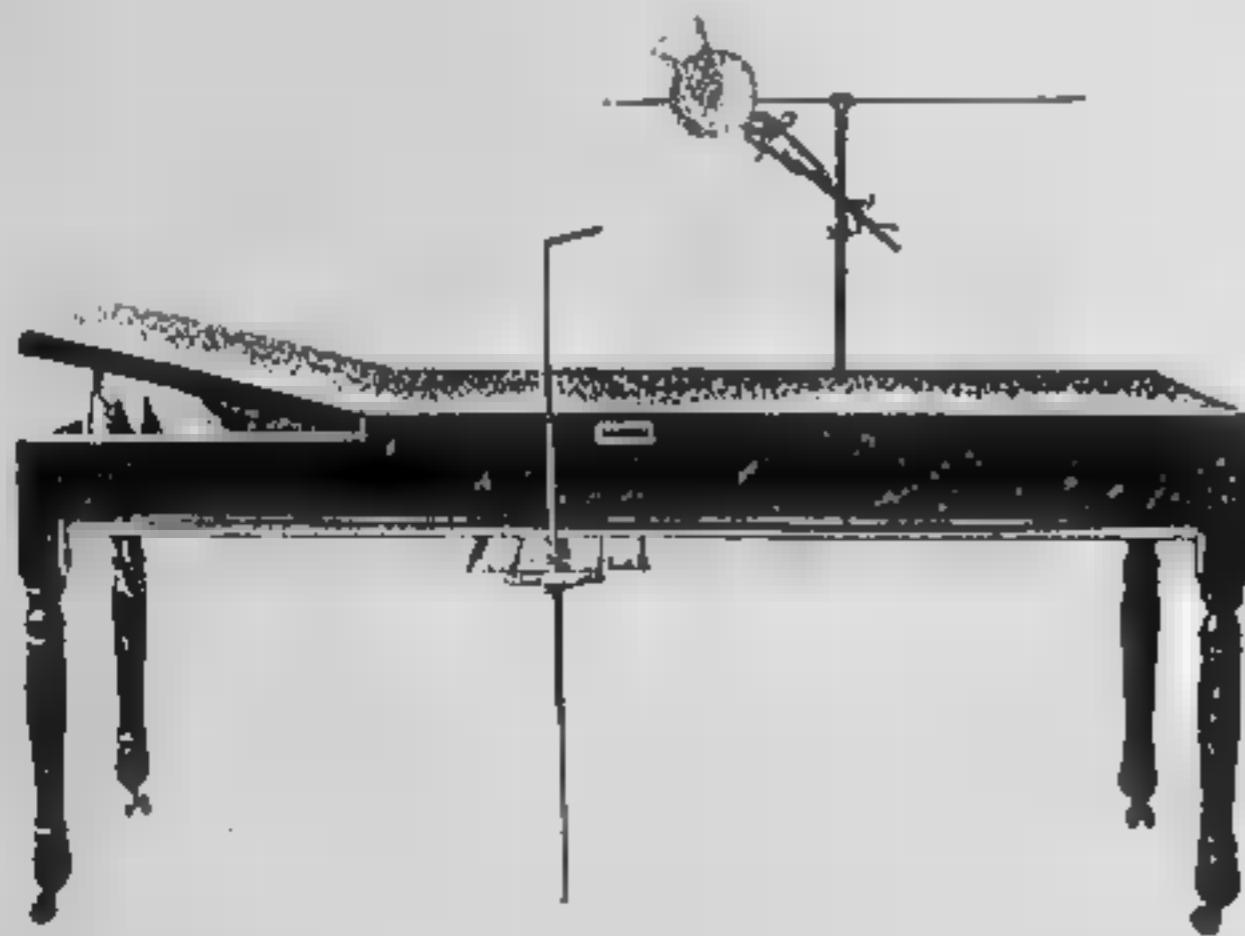
Fig. 24.

This is built after the D'Arsonval type for measuring high potential currents, where the elongation of a fine metallic wire through which the current passes, causes the movement of an indicator, which shows the intensity of the current passing, in milli-amperes. This is most valuable for noting the dosage in giving high frequency treatments.



The above Metal Tipped Body Electrode is especially devised to give a heavy effluve body treatment with Oudin Resonators.

**Radiographic Table.**



**Fig. 14.**

This form of table illustrates the latest achievements and advantages for radiographical work. It is much desired by radiographic specialists and for Hospital use.

**Illuminating Box.**



**Fig. 15.**

This will prove of great value to the practitioners. A tastefully designed box, the oblique surface of which is fitted with a series of frames to accommodate all the standard size photographic plates, has the interior constructed with a dull white reflecting surface. When this is illuminated by the electric lights within and this light shaded to the right intensity by the rheostat provided, a new value is given to radiographs and points which seemed faint or dull are brought out with startling clearness.

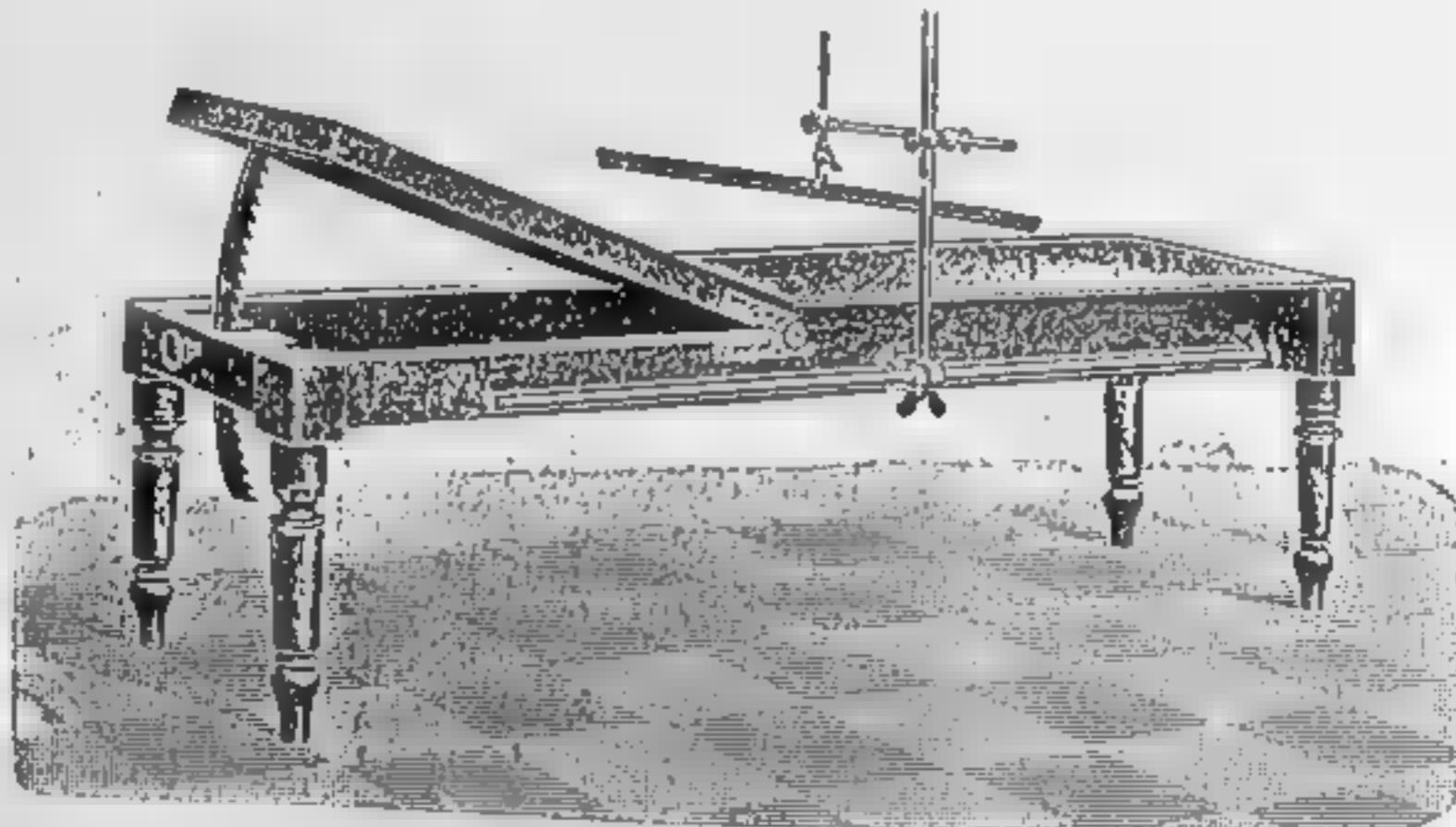
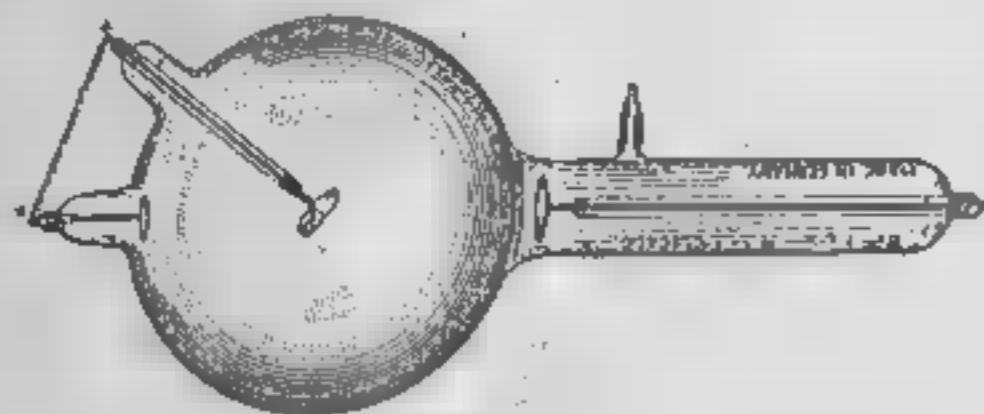


Fig. 13.

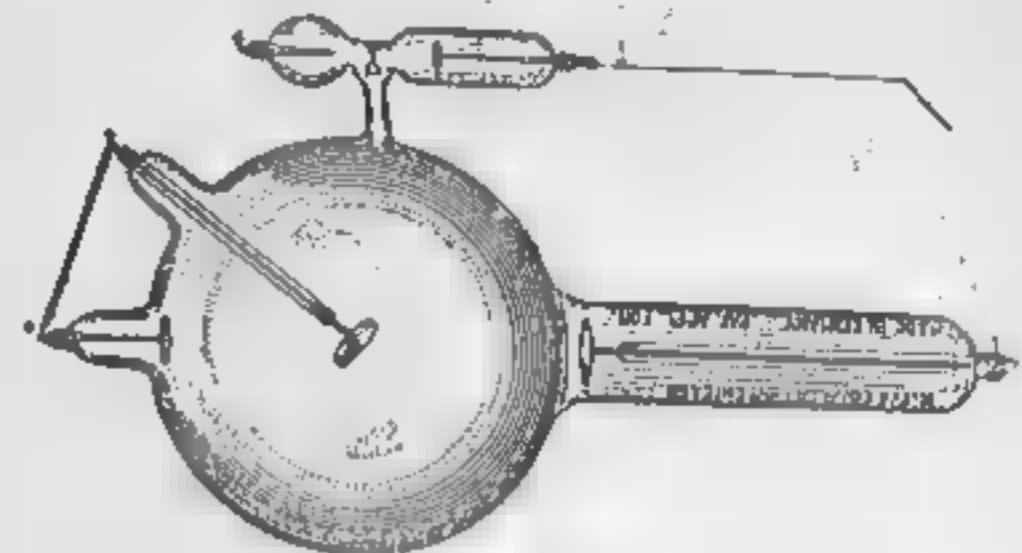
In the above cut is shown the patient table with adjustable plate holder and arm which can be used above or below the table to accommodate different cases.

**Tubes.**



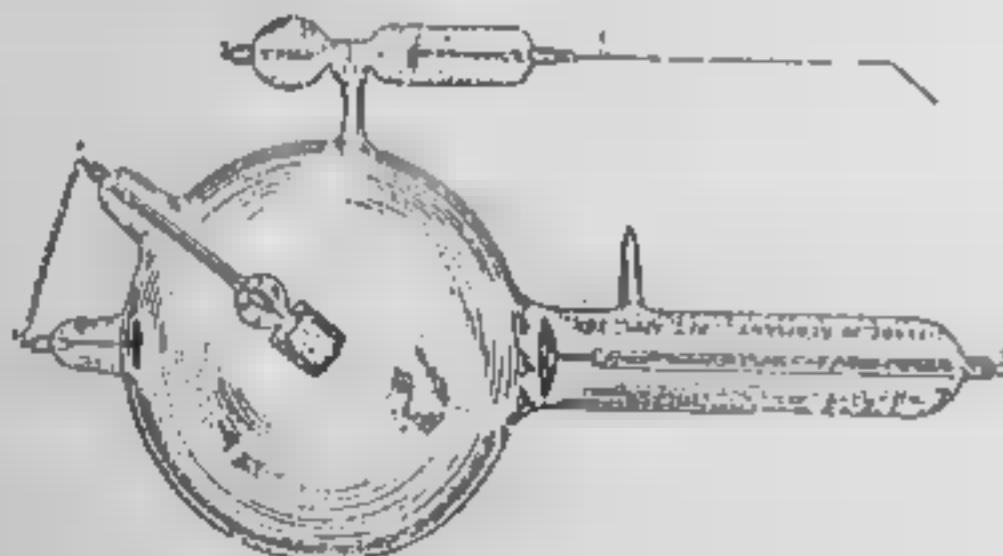
**Fig. 1.**

Illustrates the R. F. non-regulating heavy anode tube, adapted to radio-therapeutic work.



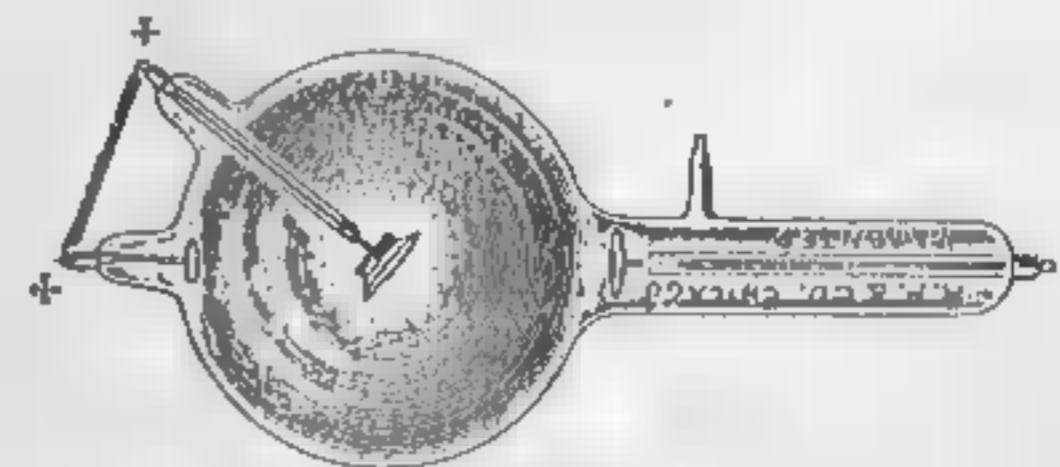
**Fig. 2.**

Same as the preceding cut with self-regulating attachment.



**Fig. 3.**

The R. F. self-regulating tube with metal jacketed anode. This tube is especially adapted for therapeutic purposes and also for ordinary diagnostic and radiographical work.



**Fig. 4.**

This tube is similar to Fig 1, but the anode has an extra flange to cut off the action of tramp rays. A very distinct hemisphere is thus created, and even at low vacuum the tube will show marked contrast and definition, in radiographic and fluoroscopic work.

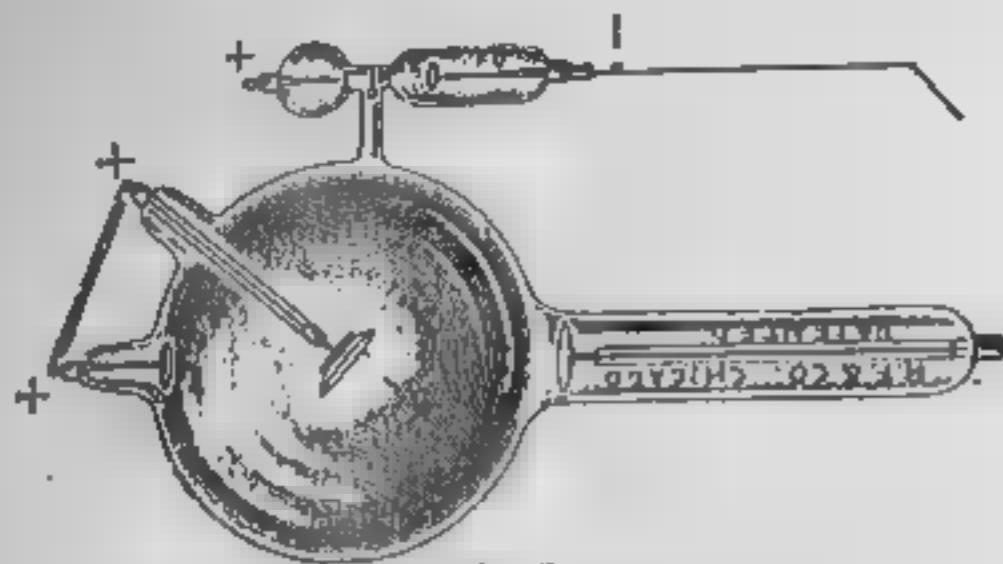


Fig. 5.

This tube is the same as Fig. 4 on the preceding page, and in addition has the self-regulating device.

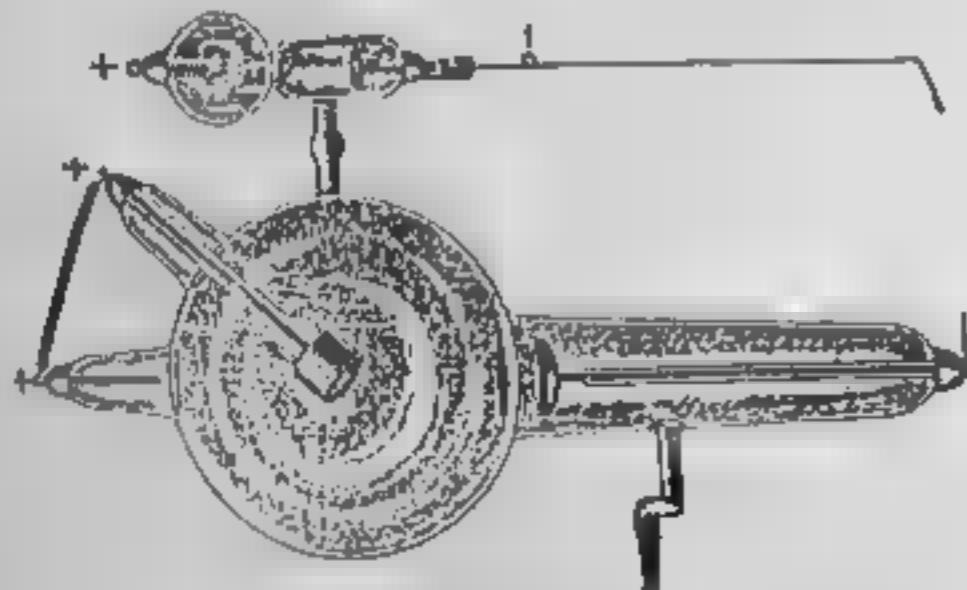


Fig. 7.

The Mueller self-regulating tube with heavy anode is well adapted to diagnostic and radiographic work.

Tubes.

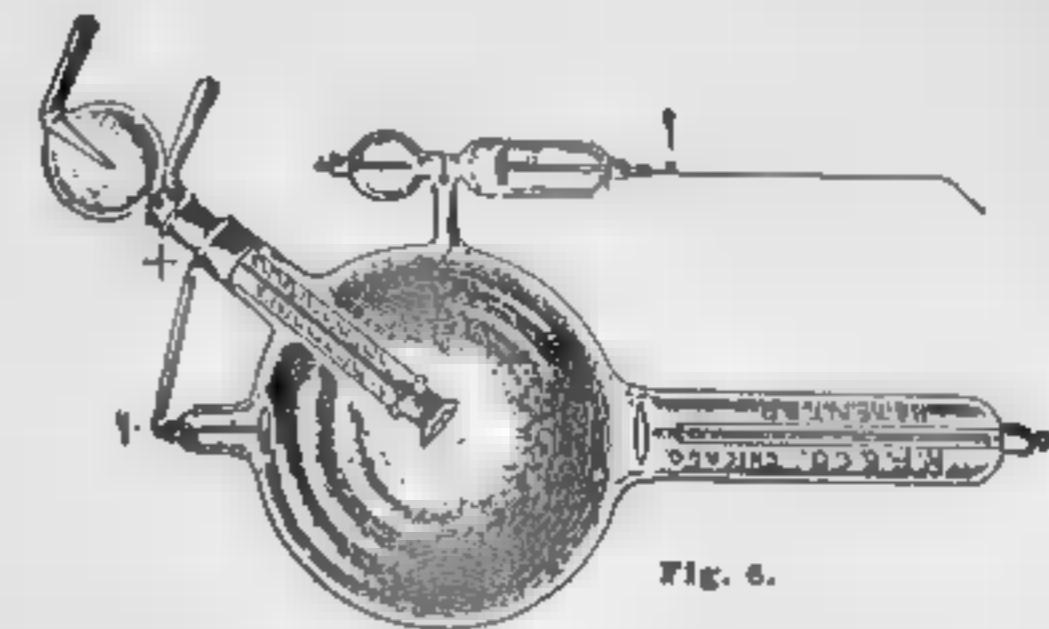


Fig. 6.

This is the same as Fig. 5 with water cooled anode. It is constructed to stand the heaviest discharges from a large coil. The anode constructed of heavy pure platinum comes in direct contact with the water, thus remaining constantly cool. We allow \$6.00 for the anode of old tubes if returned in good condition.

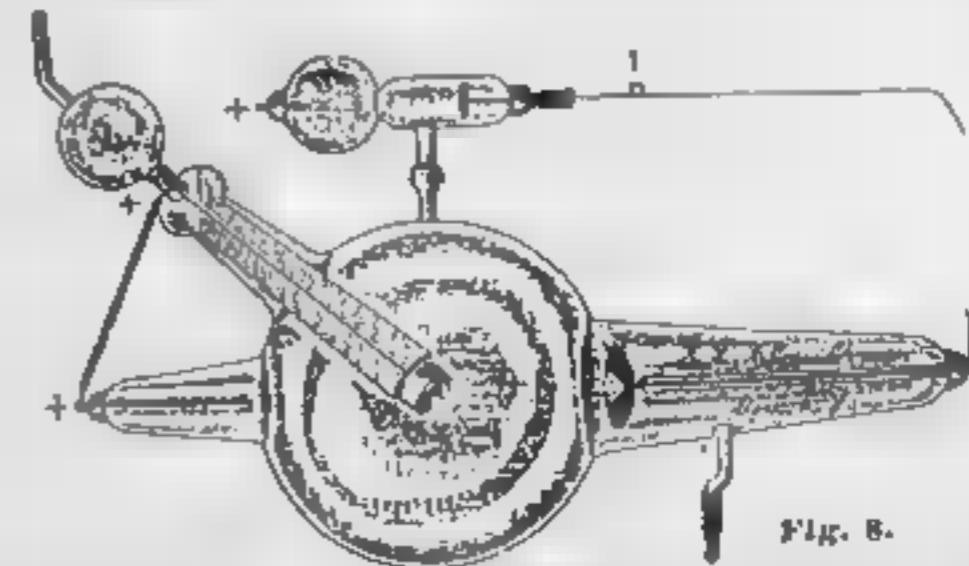


Fig. 8.

This illustrates the Mueller water cooling tube with self-regulating attachment, is well adapted to heavy work.

## Tubes.

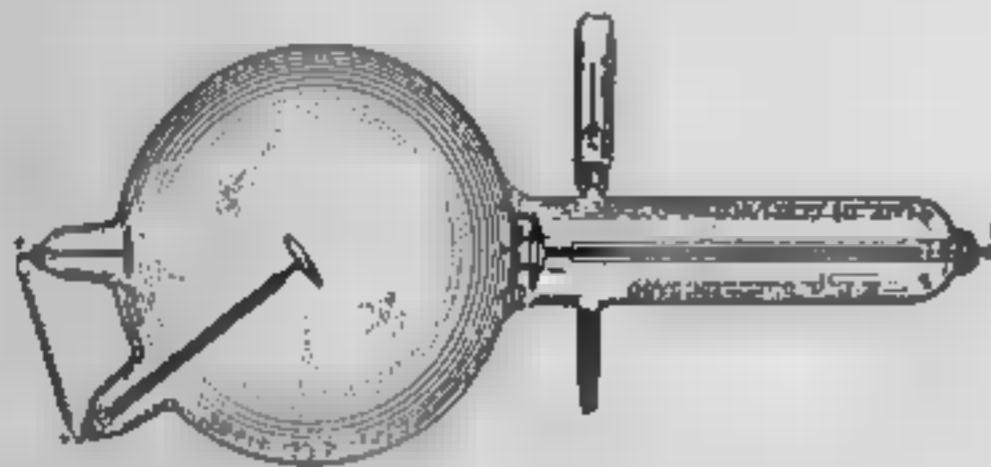


Fig. 9.

This illustrates the Gundelach tube. It is made with or without regenerating attachment and is well adapted to radio-therapeutic work.

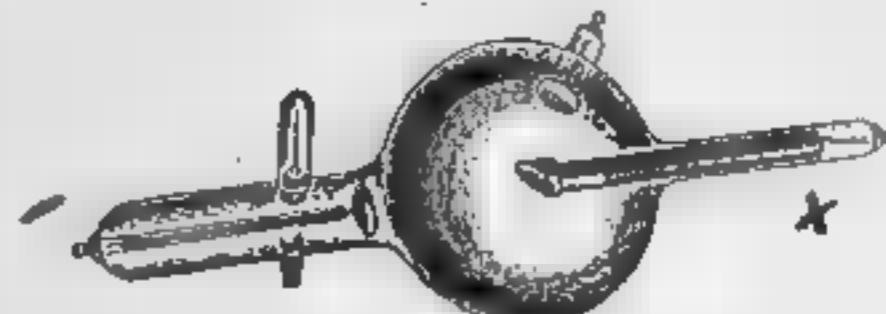
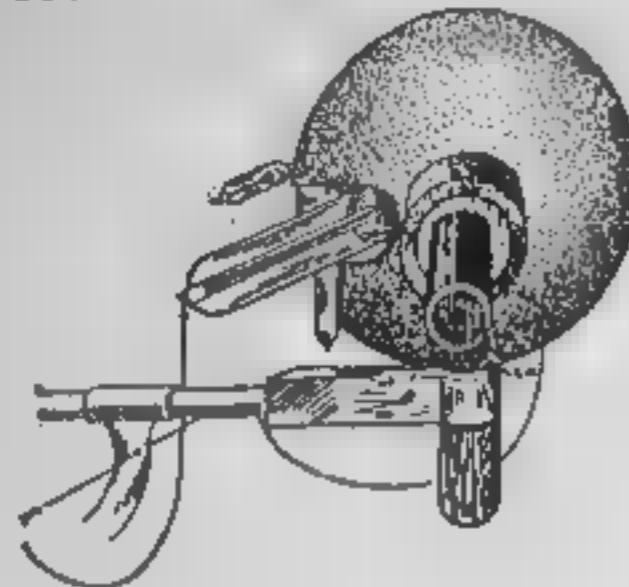


Fig. 10.

Fig. 10 shows the Gundelach tube which is best adapted for making the most difficult skiagraphs of hip joints, shoulders, and the thickest portions of the body. The target which is solid, is supported on a long metal tube, which radiates the heat and keeps the tube cool. This tube is also supplied with a platino-iridium regulator, so that the vacuum of the tube may be lowered when necessary.

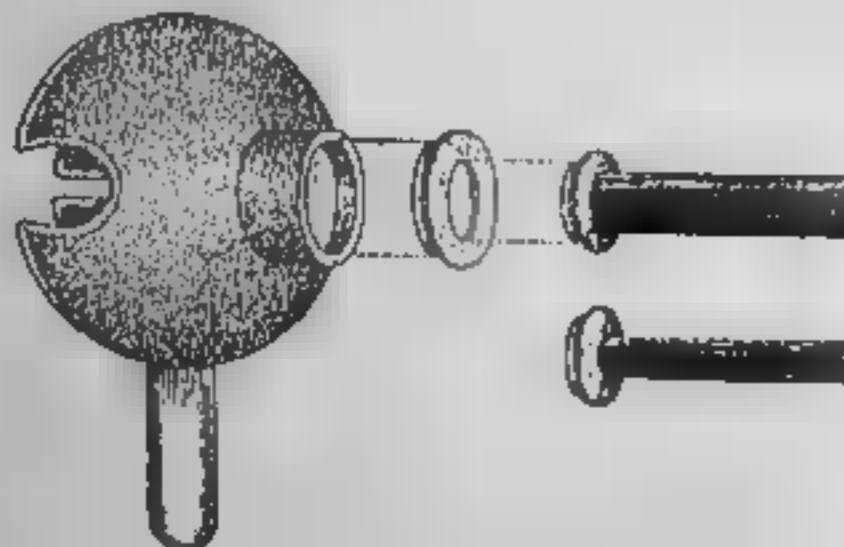
SIZE	LENGTH OF SPARK
A.....	to 20 cm
B.....	to 30 cm
C .....	to 40 cm
D.....	to 50 cm
E.....	to 60 cm
F.....	to 80 cm
G.....	to 125 cm

**Protective X-Ray Tube Shield.**



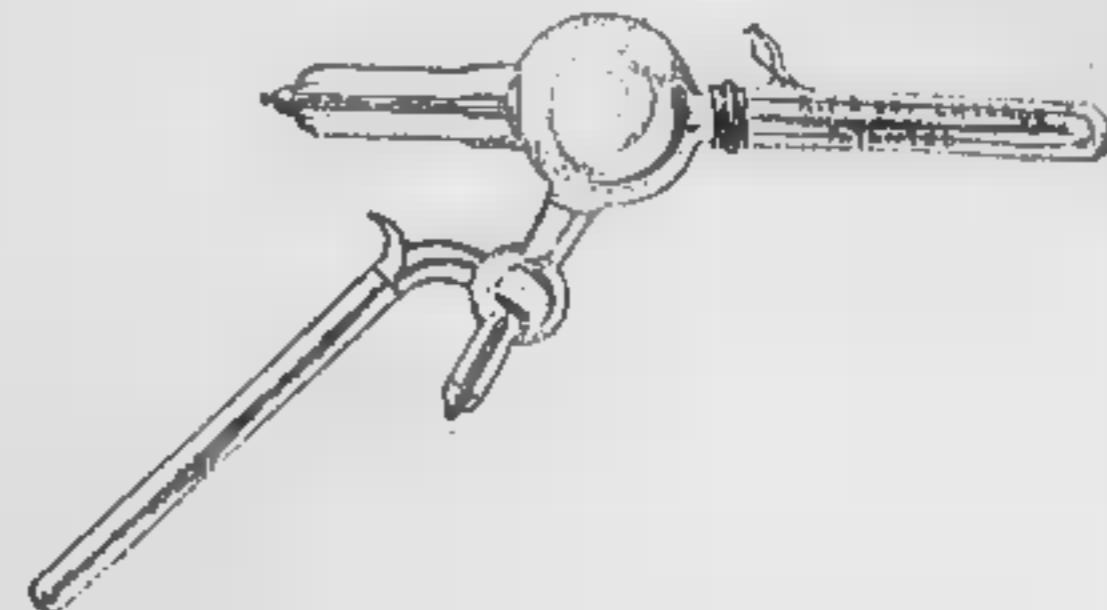
**Fig. 1.**

This shield which is shown in detail is Fig. 2 has been designed to relieve the demand for a protection against X-Rays burns. It protects the operator as well as patient. Special descriptive circular on application.



**Fig. 2.**

**Water Jacket Cancer Treatment Tube.**



This tube is especially adapted for treatment of the vagina, rectum and throat.

In this tube we have the cathode rays which are thrown along the focus tube, where the X-Rays are generated, passing in all directions, both at right angle and parallel to the focus tube.

The cathode rays are extremely hot, heating the focus part of the tube, and it is necessary to use the water jacket accompanying the tube at all times. The tube is ideal for treating a large or small diseased surface in the vagina or rectum and the X-Rays are as high as in a medium vacuum in the regular X-Ray tube.

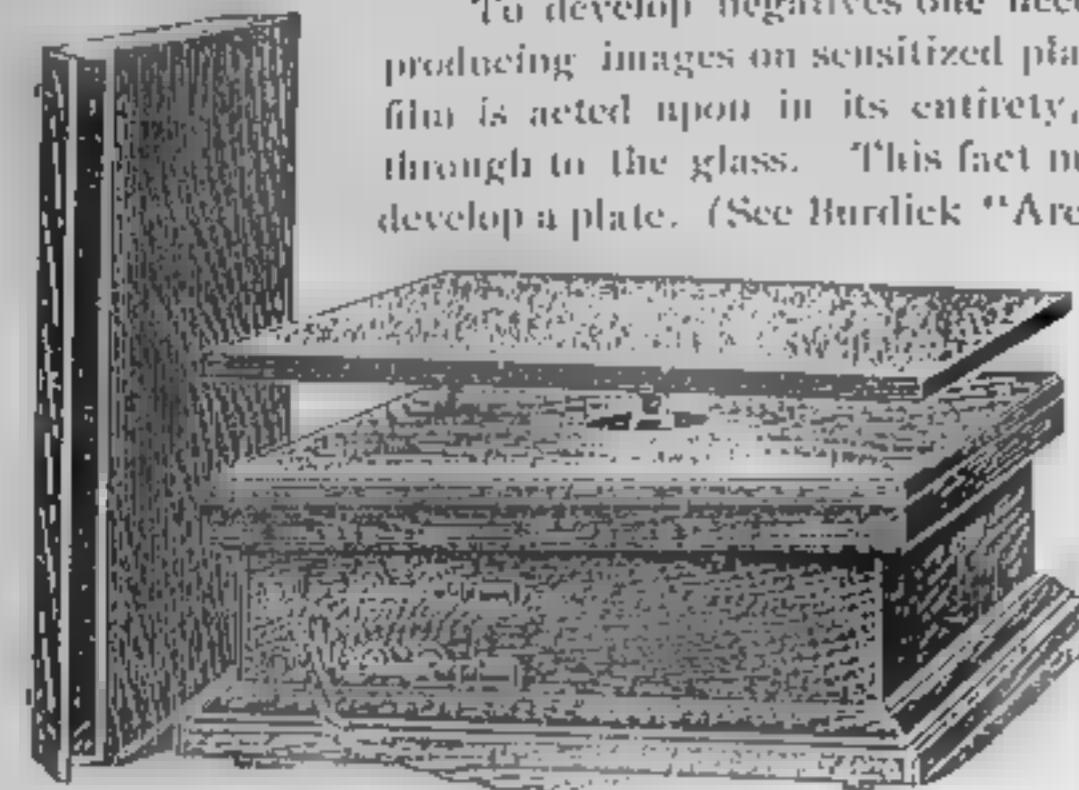
The time of exposure is reduced and it is unnecessary to shield the patient. The tube is provided with a handle. The water jacket is held in position by a rubber joint.

### The Tiltubator.

To develop negatives one need not be a skilled photogtapher. In producing images on sensitized plates by means of the X-Ray light, the film is acted upon in its entirety, the silver molecules being affected through to the glass. This fact makes it practically impossible to over develop a plate. (See Burdick "Archives of Electrology and Radiology" May, 1904.) Experience has shown

that the process of developing plates is entirely mechanical, requiring a good developer (not too strong), cleanliness, sufficient time, and a uniform motion of the developer over the entire surface of the plate.

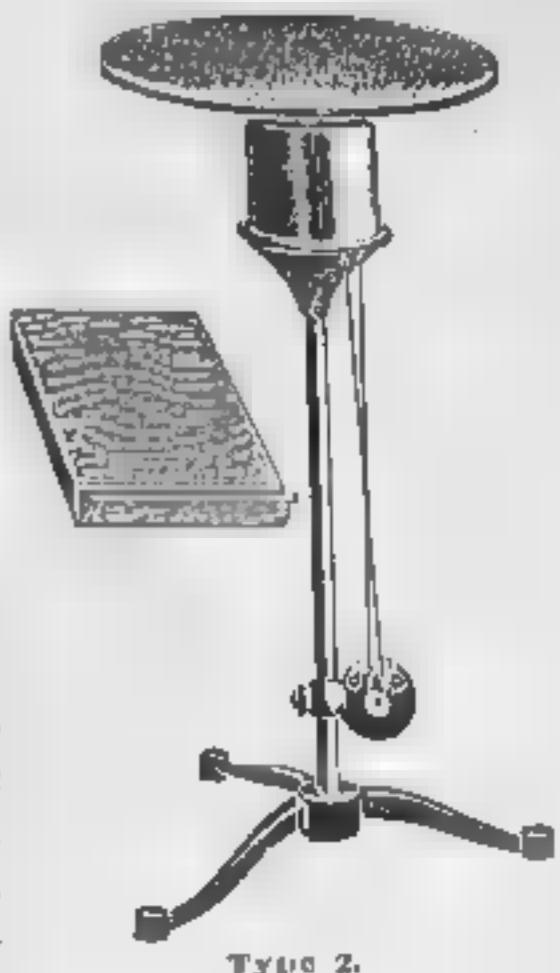
The Developing Machine illustrated in the accompanying cut, fills every requirement. The movable table imparts to the tray a uniform



Type 1.

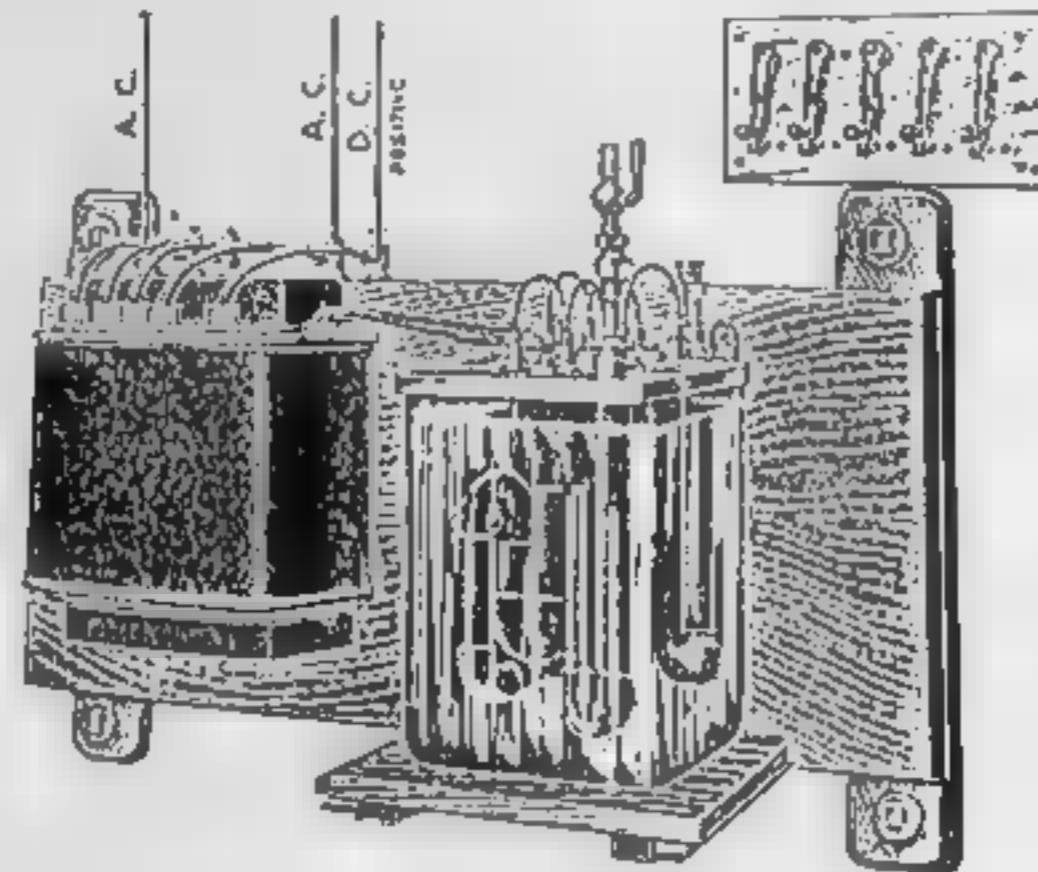
tilting motion in all directions, causing the developer to flow in slow, wavelike procession over the surface of the plate. A dark room or closet should be used for placing the tray containing plate and developer in the developing case, shown at the left of the picture. The case is light proof and when closed is placed upon the Developing Machine table, outside the dark room. By closing a switch the table is set in motion and must be allowed to run a sufficient length of time to thoroughly develop the plate. It should develop in 20 to 30 minutes ordinarily and then be transferred in the dark room to a fixing bath.

To operate the Developing Machine in a dark room a ruby light may be attached to the apparatus by the two binding posts shown in cut and turned on and off by the lower switch. We recommend the developing of plates without light, allowing the machine to do its work and thus prevent the possible fogging of plates by the too frequent exposure to a ruby light. The Developing Machine will enable operators to produce rich negatives with proper developer, while the uniform action of the machine will give them a brilliancy long desired but hard to produce.



Type 2.

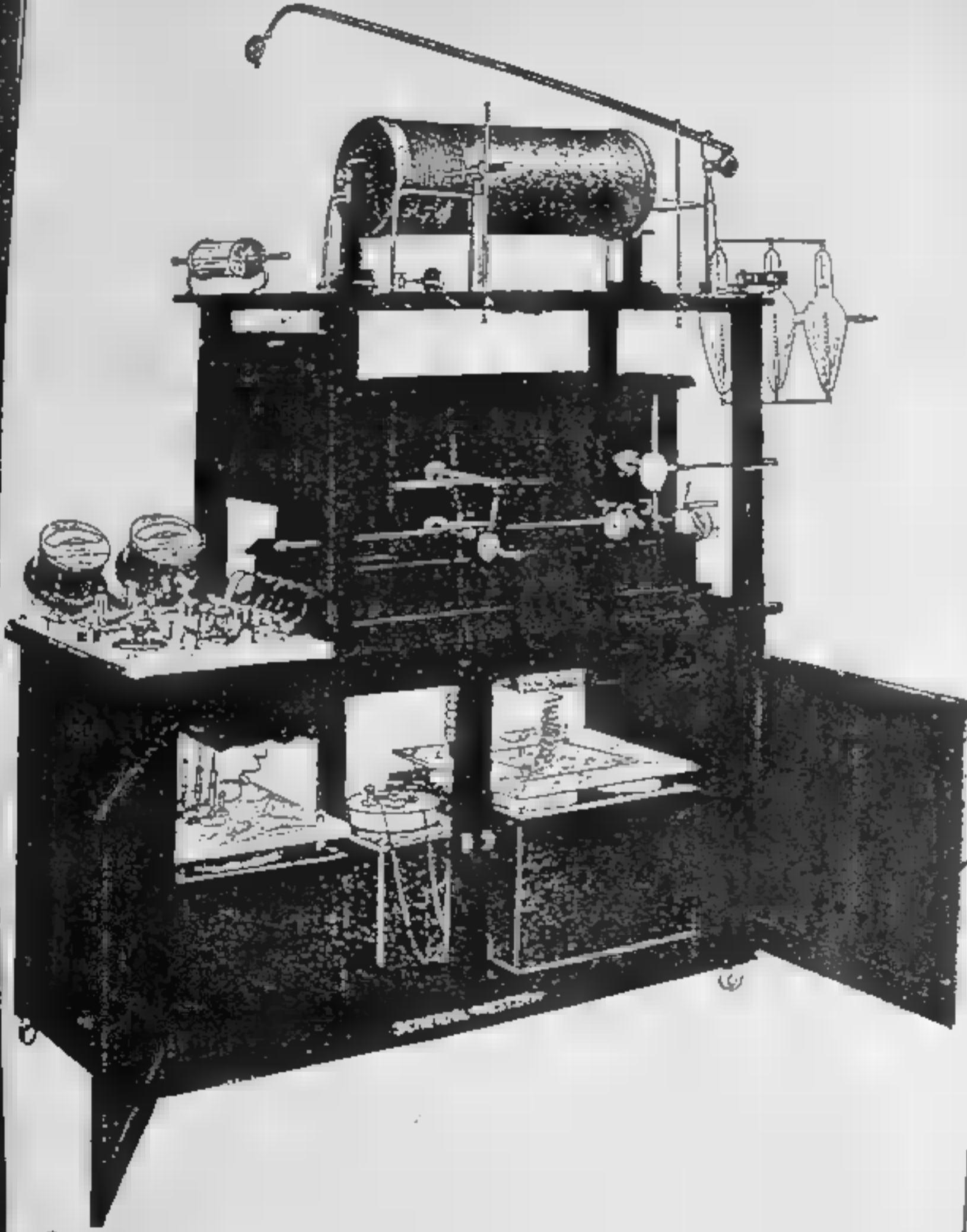
The Churcher Rectifying Interrupter.



This Rectifier will transform or rectify alternating into direct current and also act as an electrolytic interrupter. The platinum electrode at which the interruptions take place, can be supplied in several areas, thus giving a wide range in the volume of spark and number of interruptions.

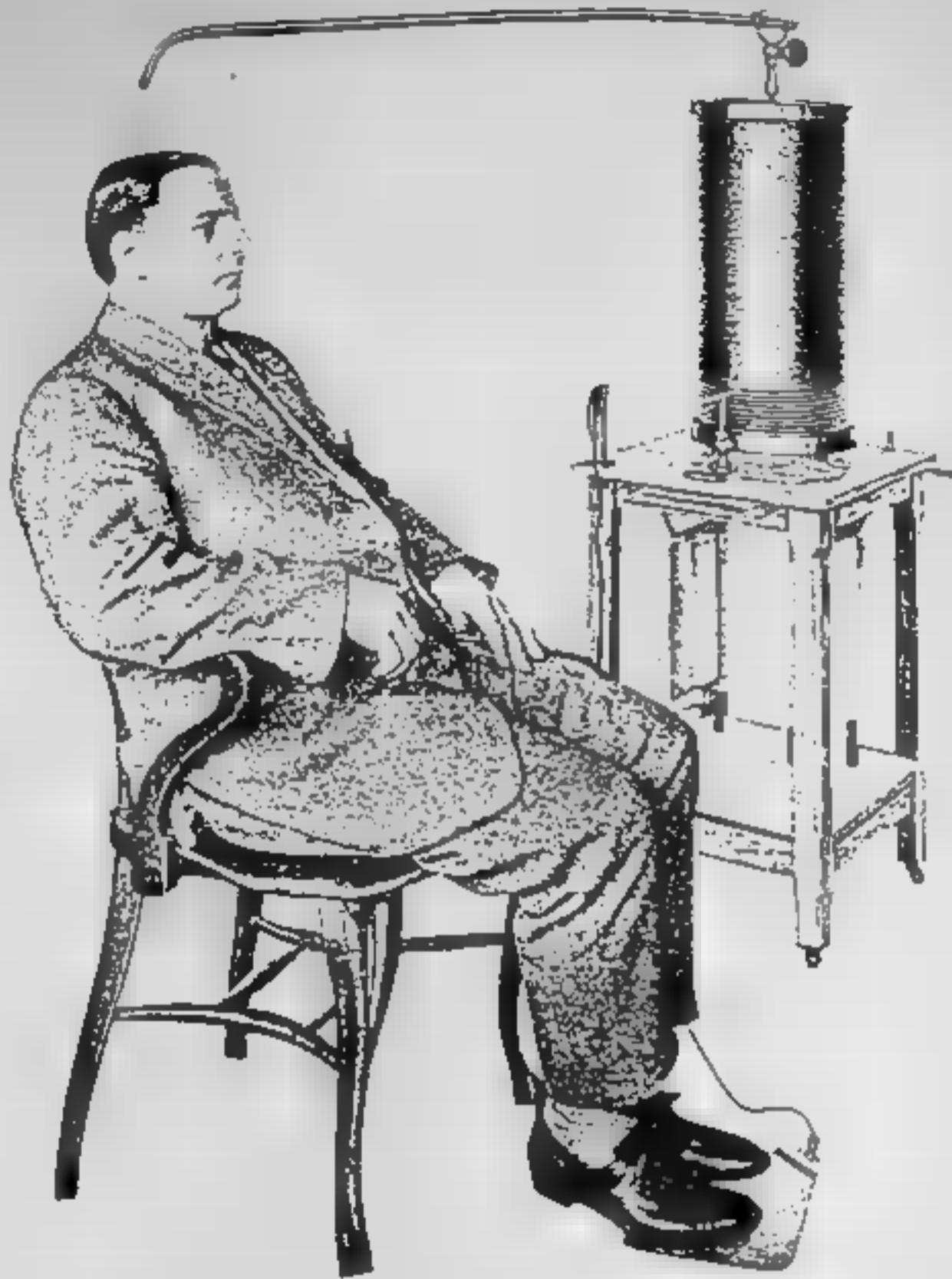
# Radiographic Coils

(Coil Catalog)



Scheidel-Western X-Ray Coil Co.  
CHICAGO, ILL.

Largest Exclusive Manufacturers  
of X-Ray Apparatus in the World



Showing Treatment with Head Breeze and Foot Plate

In the circuit is a spark gap for increasing the frequency of the oscillations of the current, and they are also increased by two Franklin plates that act in a similar manner to a Leyden jar. The purpose of the long hard rubber arm is to conduct the current above the patient when giving treatments, and a cord reel may be attached to the end of this arm. When high frequency treatments are given the electrode is connected to this cord reel. When the treatments are given as shown in the illustration, the end of this arm is placed above the head of the patient, while the metallic foot plate is in contact with his feet, and the spark gap is interposed to vary the strength of the treatment current. These are high frequency or Oudin resonator currents of large volume.

By the addition of an Oudin resonator to one of the coil outfits, a variety of powerful treatment currents can be easily obtained.

This resonator consists of a drum shaped coil of fine wire, which connects at one end to the adjustable hard rubber arm and at the other end to a coil of heavier wire. The strength of the current is regulated by varying the number of turns of coarse wire that are in the circuit by means of an easily adjusted contact that travels across this coil.

## RESONATORS

The D'Arsonval current for auto-condensation and auto-conduction, etc., is obtained by connecting to two binding posts shown on the front of the cabinet. This current differs from the high frequency current in having a lower voltage but a greater amperage and is capable of influencing more profoundly the metabolic functions of the body.

We can furnish these resonators mounted above the coils, as shown in the illustrations of the outfits A-23, A-24, B-9, B-10, B-13 and B-14. When arranged in this manner the Franklin plates are contained in the box at the end, or the resonators may be furnished, as illustrated, mounted on the stand connecting directly to the cord reels of the coils.

Scheidel-Western Resonator No. 296, mounted on stand, complete with head breeze arm and foot plate. \$50.00

Shipping weight, 115 lbs.

Dimensions, 18x18x63½ in. high.

No. 298, Extra Multiple-point

Resonator Head Breeze. .... \$15.00

No. 296A Head Breeze Arm

(Hard Rubber with Ball on End) .....

5.00

No. 296B Foot Plate. .... .50

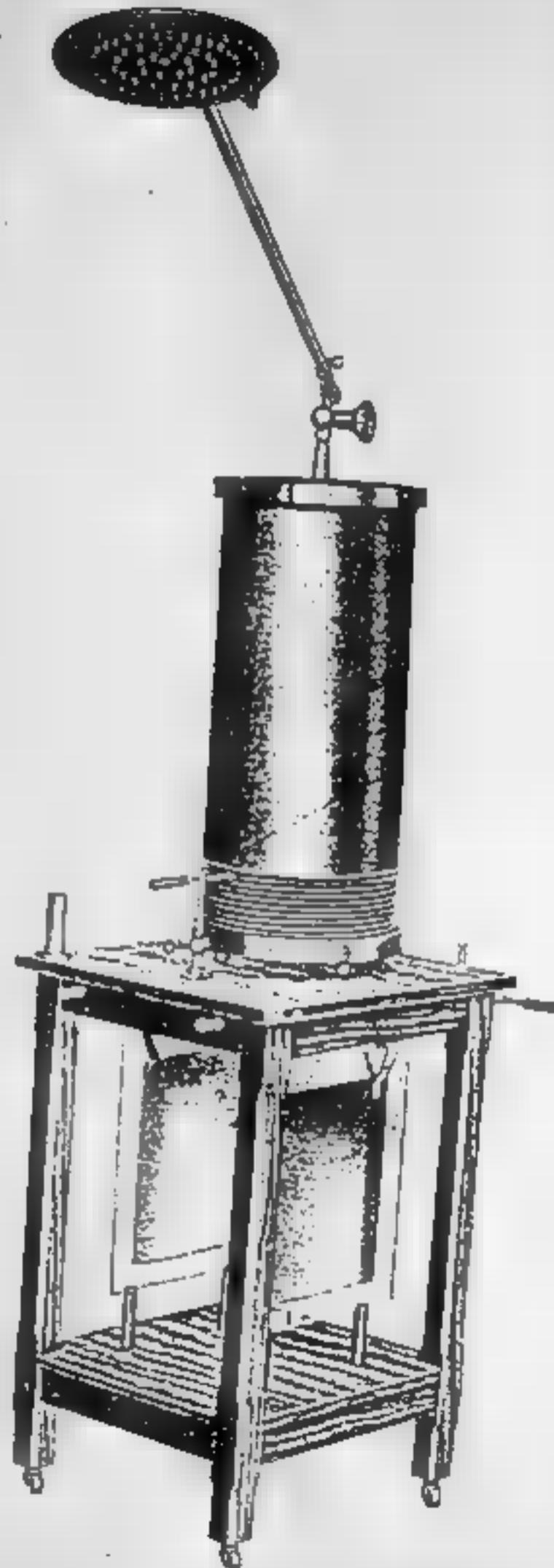
No. 296C Franklin Plates, each. 1.50

No. 296D Glass Muffler for

Spark Gap. .... 1.50

No. 296E Spark Gap Points, per

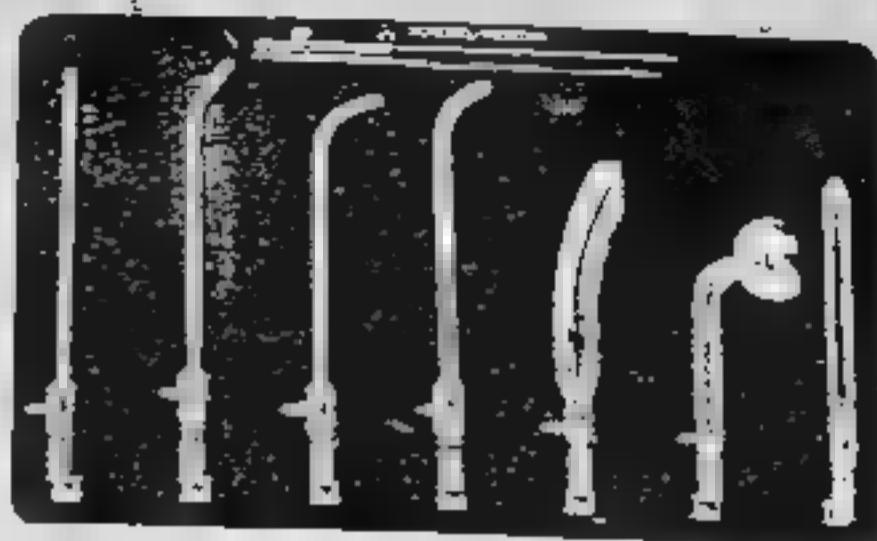
pair ..... 1.50



Resonator on Stand with Multiple-point Head Breeze

## HIGH FREQUENCY ELECTRODES

This set of electrodes is selected as being the most satisfactory for general use. A convenient method of arranging them is as shown in illustration mounted on a polished mahogany finished board to hang on the wall near the coil outfit.



No. 370A Urethral .....	\$1.50
No. 370B Throat .....	1.50
No. 370C Nasal .....	1.50
No. 370D Vaginal .....	1.50
No. 370E Surface .....	1.50
No. 370F Rectal .....	1.50

No. 370Q Urethral, straight...	1.50
No. 370G Insulated Handle...	1.00
No. 370H Electrode Board...	2.00
No. 370 Complete set of Electrodes mounted on board.....	\$10.00

Shipping weight, 15 lbs.

## AUTO CONDENSATION PAD



For the satisfactory administration of the D'Arsonval current an auto-condensation pad is necessary. This pad is made of thin fiber insulation and is in two parts so that auto-condensation treatments may be given as well as auto-condensation.

Thin Auto-Condensation Pad, No. 340, complete with connecting cord .....

\$10.00

Shipping weight, 15 lbs.

## Scheidel-Western Vacuum Electrodes.



In the regular type of vacuum electrode considerable resistance is offered to the passage of the current by the glass of the electrode. To overcome this we have arranged these electrodes with a round brass end that slips on the insulated handle and is directly connected to the aluminum rod on the inside of the electrode, insuring a continuous and steady flow of current.

Please order by number or specify if the electrodes you are using have the brass end, so that those we send you will fit into your handle.

No. 370. Scheidel-Western Vacuum Electrodes, complete set of seven and insulated handle, mounted on board.....	Snow \$10.00
No. 370A. Urethral, curved. Snow \$1.50	No. 370Q. Urethral, straight.....
No. 370B. Throat ..... Snow 1.50	..... Soda \$1.50
No. 370C. Nasal ..... Snuff 1.50	No. 370G. Insulated Handle.....
No. 370D. Vaginal ..... Soak 1.50	..... Soggy 1.00
No. 370E. Surface ..... Sober 1.50	No. 370H. Electrode Board. Soil 2.00
No. 370F. Rectal ..... Sock 1.50	

## Scheidel-Western Insulated Vacuum Electrodes.

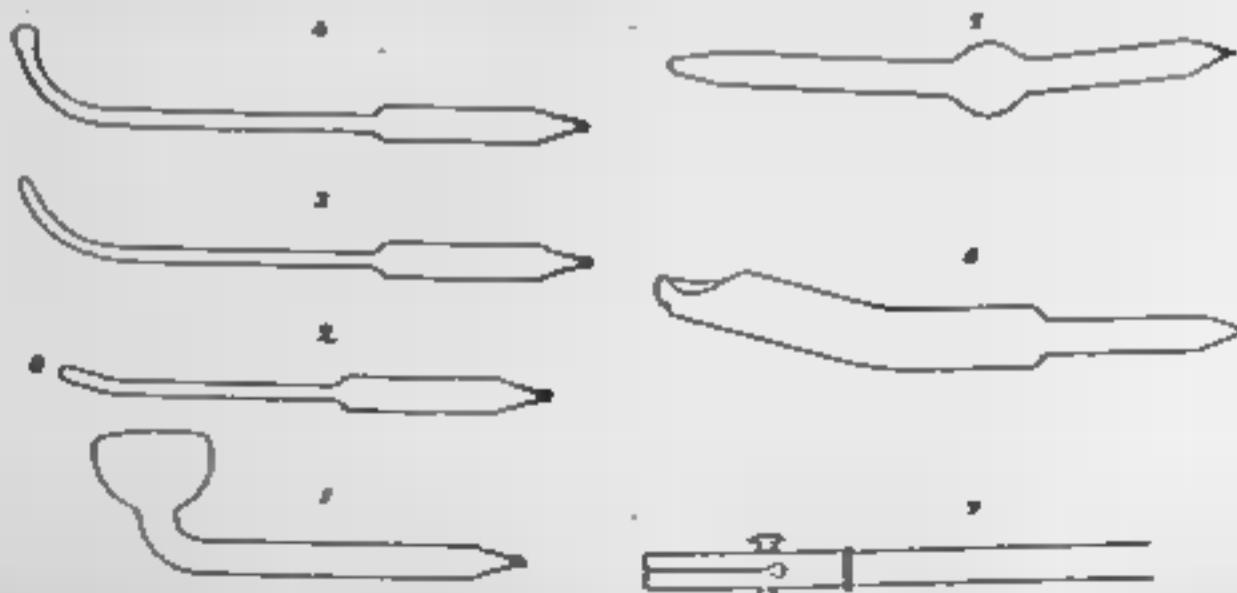
The same shapes as the electrodes listed above (No. 370), but having an outside air chamber insulated so that the current passes to the body only from the tip of the electrode. They are particularly valuable for official work.

No. 371A. Urethral, curved. Solar \$3.00	No. 371E. Surface ..... Sough \$3.00
No. 371B. Throat ..... Sole 3.00	No. 371F. Rectal ..... Sour 3.00
No. 371C. Nasal ..... Song 3.00	No. 371Q. Urethral, straight.....
No. 371D. Vaginal ..... Soot 3.00	..... Spa 3.00

## S.-W. Columbia Vacuum Electrodes.

These electrodes are constructed in the usual manner without the metal tip, but are full size and correctly proportioned.

Please specify number when ordering.



No. 366. Columbian Vacuum Electrodes, set of six and insulated handle	Spade \$4.00
No. 366-1. Surface ..... Span .75	
No. 366-2. Nasal ..... Spawn .75	

No. 366-3. Urethral .....	Spear .75
No. 366-4. Throat .....	Speck .75
No. 366-5. Rectal .....	Spell .75
No. 366-6. Vaginal .....	Spere .75
No. 366-7. Handle	Spice 1.00

S.-W. Columbia Insulated Vacuum Electrodes.



15



16



17



18

No. 367-12. Ear ..... Spike \$1.50

No. 367-16. Tongue ..... Spike \$1.50

No. 367-13. Rectal ..... Spill 1.50

No. 367-17. Urethral ..... Split 1.50

No. 367-14. Post-Nasal ..... Spin 1.50

No. 367-18. Nasal ..... Spoke 1.50

No. 367-15. Vaginal ..... Spirt 1.50

All Columbia Vacuum Electrodes are made to fit in the same size handle.

No. 364. Columbia Vacuum Electrode, single eye, ..... Spout \$0.75



No. 365. Columbia Vacuum Electrode, double eye, ..... Spout 1.00



S.-W. Condenser Vacuum Electrodes.

No. 362. Vacuum Electrode, complete, with handle, condenser arranged for the use of very heavy currents; large size ..... Spool \$4.50

No. 363. Condenser Vacuum Electrode; small size ..... Spoon \$2.50

S.-W. Ellcuse Electrodes.



No. 368. Static Ellcuse Electrode, ..... Spout \$2.50

No. 369. Titus Ellcuse Electrode, ..... Resonator \$2.50

For increasing the length of the ellcuse of a High Frequency Current.

S.-W. Fulgeration Electrodes.

No. 372. Columbia Fulgeration Electrode, toe fit into Columbia Insulated Handle No. 366-7, for removal of warts, moles, etc., by High Frequency current, ..... Rung \$2.50



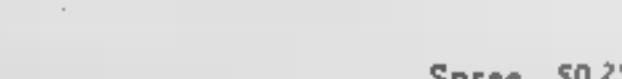
No. 373. Columbia Fulgeration Handle and two points ..... Spray 2.50



For Fulgeration work either with the High Frequency or Diathermic current and essential for the High Frequency work in the bladder.



No. 374. Fulgeration special insulated wire for use with No. 373 handle, per foot, ..... Spree \$0.25



No. 375. Fulgeration Foot Switch. A very convenient method for turning on and off current in fulgeration work, ..... Sprig 5.00

(See description on page 201)

No. 376. Columbia Ozone Generator, extra large size, ..... Runic 15.00

Rutan 10.00

No. 377. Columbia Ozone Generator, regular size, ..... Ruptal 10.00

Sprit 1.00

No. 378. One bottle, 4 oz., oil for ozone generator, ..... Sprit 1.00

These generators are sent out complete with mouth and nose pieces, filling funnel and bottle of oil, and may be used with any High Frequency current.

ESTABLISHED IN GERMANY 1885  
IN AMERICA 1895.

WORLD'S STANDARD

CABLE ADDRESS SCHEIDELCOIL CHICAGO



LOCAL AND  
LONG DISTANCE  
PHONES.  
MAIN 1766  
AUTOMATIC 8715

## Scheldel Oudin Resonator

This type of apparatus is designed in strict accordance with the views of Dr. Oudin, one of the pioneers in the therapeutic application of high frequency currents. Although numerous other devices have been suggested and built for the same purpose during the years past, none of all those have attained the popularity as the original design. The reason is based on the fact that this instrument has received extensive consideration among all the writers in this line of work, thus making the apparatus a standard which is today inseparable from the name of its originator. While similarity in external appearance is not difficult to obtain, we have not been satisfied with this effect. Realizing that more harm than good generally results from blindly copying foreign apparatus, we engaged in a line of experimental work to investigate a rather complex series of physical problems, which are intimately connected with the design and construction of this class of apparatus. The fruits of this work are utilized in the most important features of this instrument.

Two different types are represented here, the "open" and "enclosed" one. Both are identical in construction and operation, but different in exterior appearance. The beauty of design and finish, the care and high grade workmanship that is bestowed upon every part, regardless of its size and importance, assure this instrument the proper position among our products, and have strengthened anew the reputation enjoyed by all our apparatus. As this instrument is used in connection with induction coils of our own make, as well as with those of other builders, it becomes necessary to inform us when ordering about the size, make of coil, kind of current and type of primary interrupter employed. Such information permits us to test the apparatus under actual working conditions, and is always properly considered in the directions and connection diagrams which accompany each apparatus.

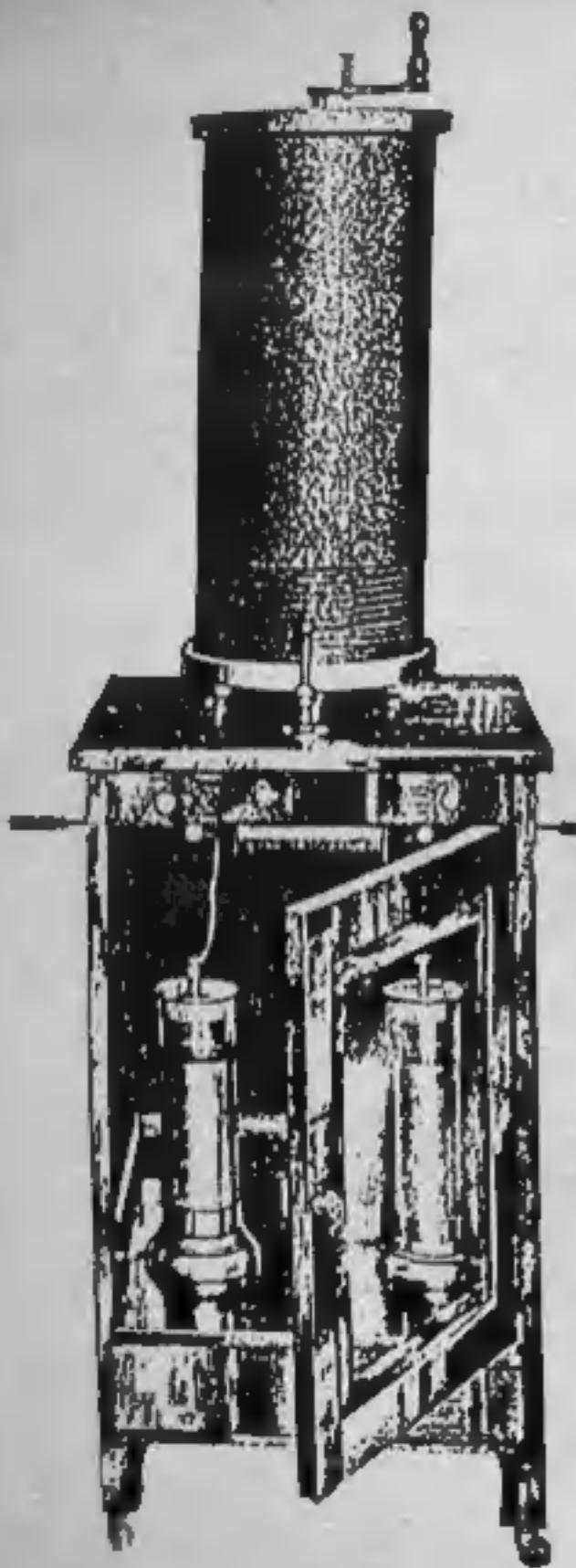


Fig. 48.

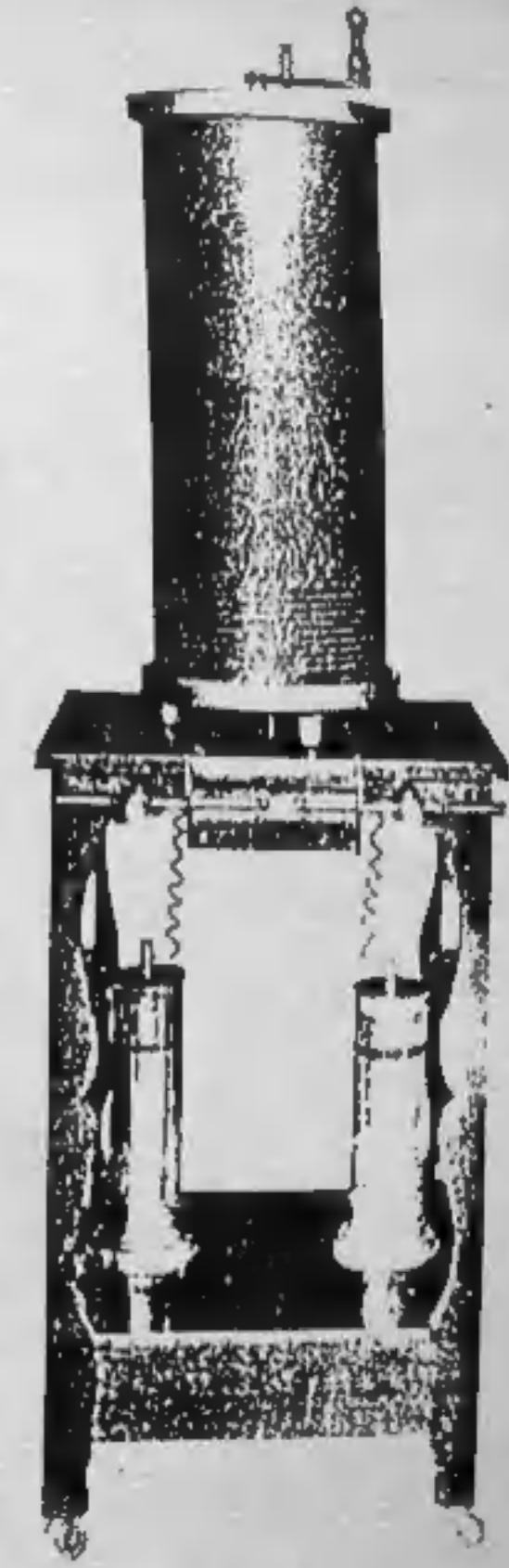


Fig. 49.

## The Scheidel Double Resonator

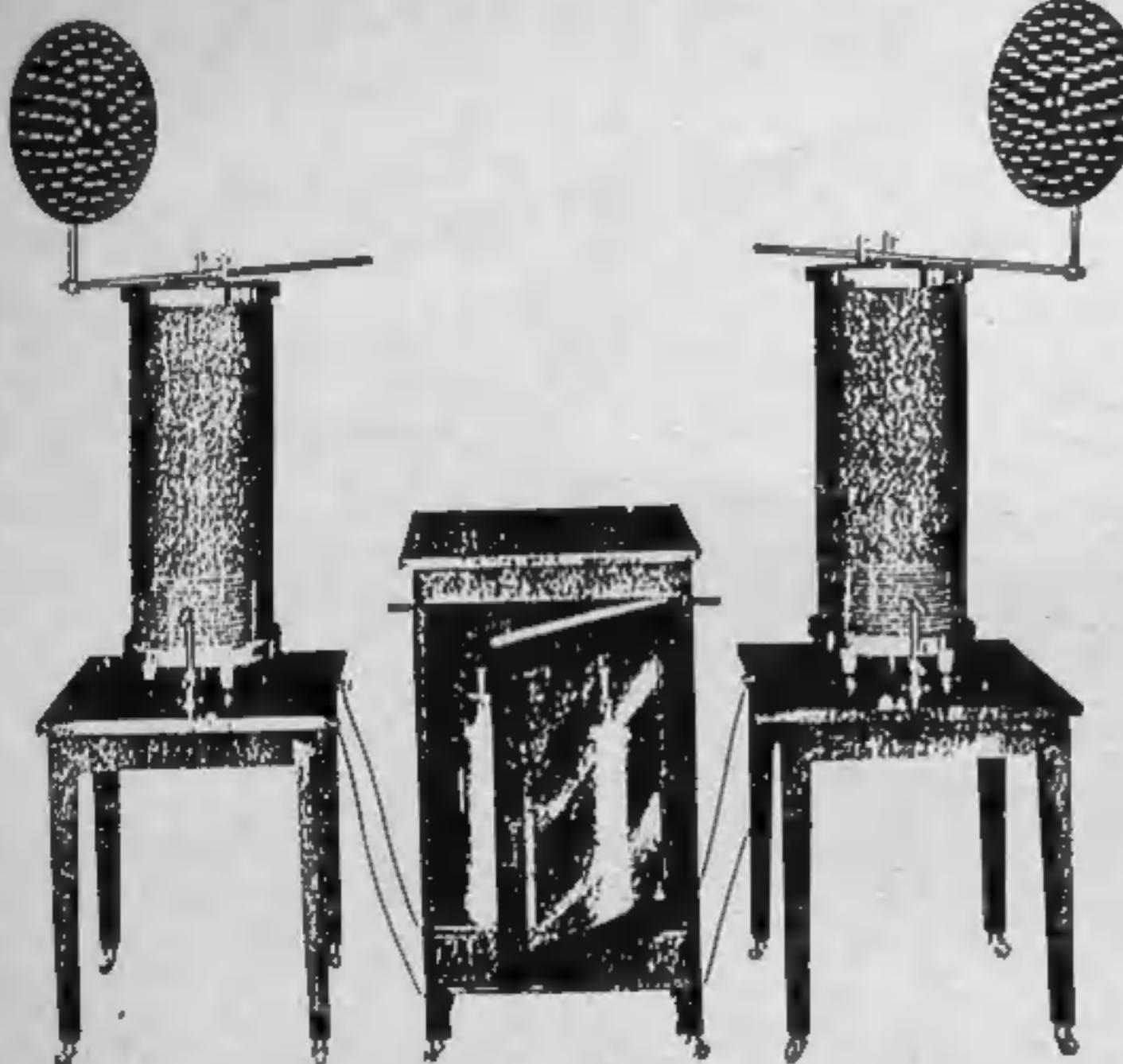


Fig. 50.

We wish to call your attention to the fact that this instrument is not a mere duplication of our "Oudin" resonator. It is designed and built for the distinct purpose of generating high frequency currents of a definite polarity which feature permits the concentration of the high frequency discharges upon the patient.

Dr. Oudin attributes most of his success to this method of treatment. Naturally, the elluvia generated by this instrument is of much greater intensity and the effects upon the patient is correspondingly more pronounced. A set of elluvia discs, furnished with the instruments permit the direct application of the elluvia upon the patient by placing him between the discs, which are carried by brackets, which are adjustable in all directions.

All electrodes or other devices, such as auto-condensation couches, foot-plates, auto-condensation solenoids, high frequency light bath chairs, can be used with this instrument, and will give much superior results than obtained with the single resonator. As shown in the illustration, the apparatus consists of five different parts:

First, the center cabinet containing the adjustable spark gap and the Leyden jars, with all necessary connections.

Second, two drum stools carrying the solenoids and adjustable contact devices.

Third, two elluvia discs with adjustable brackets, which are fastened to the top of the drums.

In actual use the apparatus is assembled and connected, as shown in the halftone, binding posts being marked for this purpose. The instrument is of the highest finish and workmanship throughout, is thoroughly tested and adjusted before shipment, while explicit directions, illustrated by diagrams of connections, permit even the beginner in this line of work to attain quickly the proficiency and skill of the experienced operator.

In ordering the apparatus we should always be informed about the size, make and construction of the induction coil the instrument is to be used with, the nature of current supply and the type interrupter which will be employed. This information is a necessity

with orders for this class of apparatus. Tests are made under actual working conditions before the apparatus leaves our hands, and the vexation feared by the inexperienced is as a consequence an unknown feature with purchasers of our apparatus.

## Complete X-Ray and High Frequency Equipment

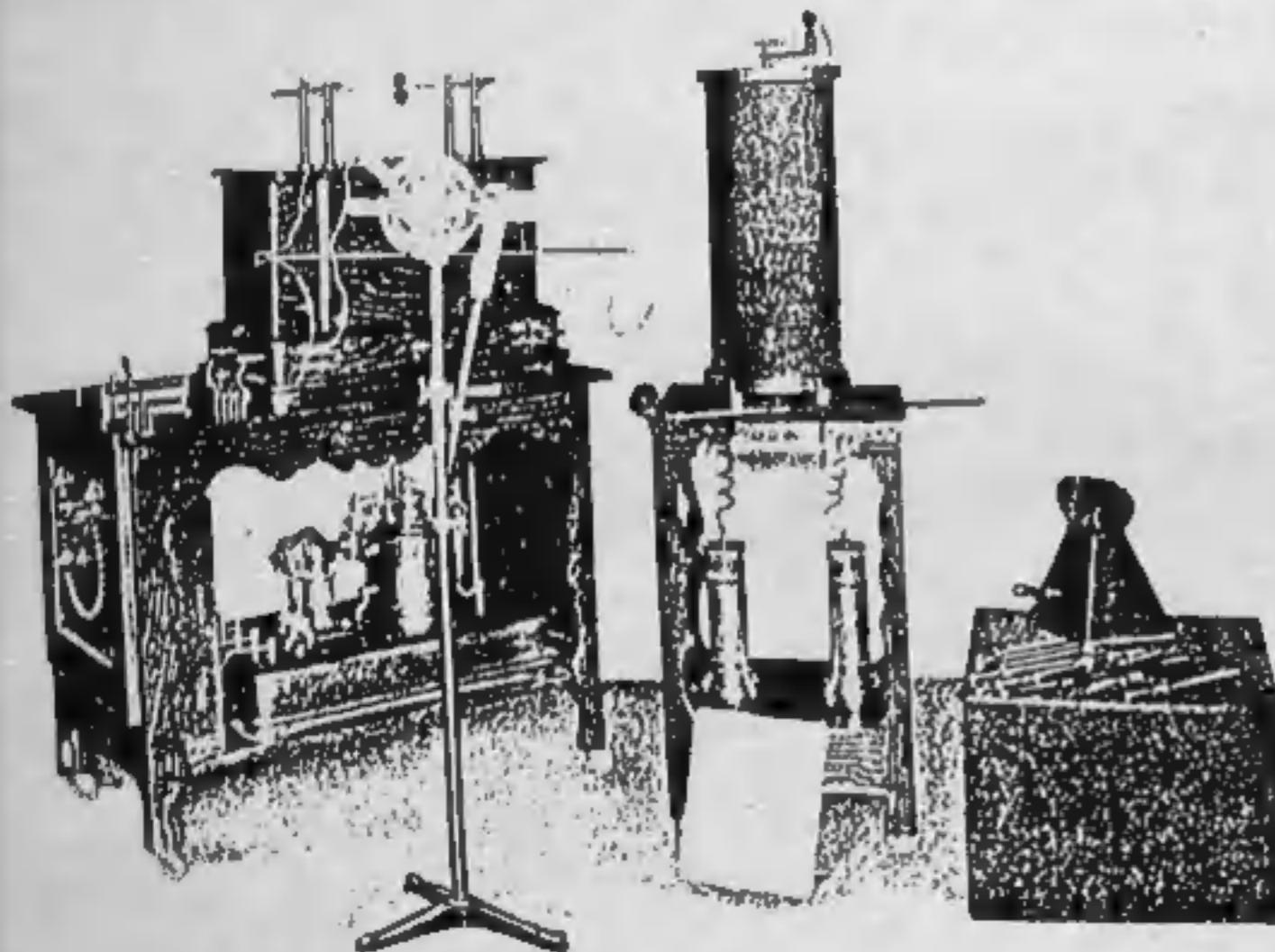


Fig. 47.

This outfit consists of a combination of our standard apparatus, which will be found fully sufficient for the requirements of the average physician. It consists of the following apparatus which may be somewhat modified to suit the various forms of electric current supplied by the central stations.

Assuming 110 volts direct current as a source of energy the equipment comprises the following apparatus:

- Scheidel Standard 12-inch D. C. Coil with primary of variable inductance.
- " " mercury turbine interrupter, complete with 1-10 H. P. driving motor and condenser.
- " " coil table with two switches, one for motor and one for main current, serving as pole changer.
- " " motor speed controlling rheostat mounted on table.
- " " main regulating rheostat, built into table.
- " " tube stand with cords.
- " " fluoroscope.
- " " X-Ray tube for general work.
- " " Ondlin resonator.
- " " set of high frequency vacuum electrodes with board and handle.
- " " foot plate.

If the source of energy is alternating current then the mercury turbine interrupter is omitted. Scheidel electrolytic interrupter and Scheidel valves, both water jacketed, substituted.